

297-8981-823

DMS-100 Family

Commands Release

Reference Guide

Volume 1 of 2

NA006 Standard 05.03 April 1997

DMS-100 Family

Commands Release

Reference Guide

Volume 1 of 2

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About this document

The information contained in this document has to do with changes, additions, or deleted information in reference to man-machine interface (MM) or commands for DMS-100 and SMX-200 in the North American software releases. This document includes information appropriate for the following product computing module loads (PCLs): LETB005, LECB005, and CDNB005. This document is broken into two volumes. Volume 1 includes all releases prior to NA005; and Volume 2 includes release NA005.

For information on commands for the Signaling Transfer Point (STP) product, refer to *SuperNode Signaling Transfer Point Maintenance Guide*, 297-8101-541. For information on commands for the DMS SuperNode Service Control Point (SCP) product, refer to *SuperNode Service Control Point II Maintenance Guide*, 297-5131-541

When to use this document

This document is designed as a stand-alone support for all Release NA005 equipment users. This document is a comprehensive user guide and should be used as such. Since this is the first combined, stand-alone version for this release, this document is numbered 03.01.

How to check the version and issue of this document

The version and issue of the document are indicated by numbers, for example, 01.01.

The first two digits indicate the version. The version number increases each time the document is updated to support a new software release. For example, the first release of a document is 01.01. In the *next* software release cycle, the first release of the same document is 02.01.

The second two digits indicate the issue. The issue number increases each time the document is revised but rereleased in the *same* software release cycle. For example, the second release of a document in the same software release cycle is 01.02.

To determine which version of this document applies to the software in your office and how documentation for your product is organized, check the release information in *Product Documentation Directory*, 297-8991-001.

This document is written for all DMS-100 Family offices. More than one version of this document may exist. To determine whether you have the latest version of this document and how documentation for your product is organized, check the release information in *Product Documentation Directory*, 297-8991-001.

What precautionary messages mean

The types of precautionary messages used in NT documents include attention boxes and danger, warning, and caution messages.

An attention box identifies information that is necessary for the proper performance of a procedure or task or the correct interpretation of information or data. Danger, warning, and caution messages indicate possible risks.

Examples of the precautionary messages follow.

ATTENTION Information needed to perform a task

ATTENTION

If the unused DS-3 ports are not deprovisioned before a DS-1/VT Mapper is installed, the DS-1 traffic will not be carried through the DS-1/VT Mapper, even though the DS-1/VT Mapper is properly provisioned.

DANGER Possibility of personal injury



DANGER

Risk of electrocution

Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed. The inverter contains high-voltage lines. Until the fuses are removed, the high-voltage lines are active, and you risk being electrocuted.

WARNING Possibility of equipment damage

**WARNING****Damage to the backplane connector pins**

Align the card before seating it, to avoid bending the backplane connector pins. Use light thumb pressure to align the card with the connectors. Next, use the levers on the card to seat the card into the connectors.

CAUTION Possibility of service interruption or degradation

**CAUTION****Possible loss of service**

Before continuing, confirm that you are removing the card from the inactive unit of the peripheral module. Subscriber service will be lost if you remove a card from the active unit.

How commands, parameters, and responses are represented

Commands, parameters, and responses in this document conform to the following conventions.

Input prompt (>)

An input prompt (>) indicates that the information that follows is a command:

>BSY

Commands and fixed parameters

Commands and fixed parameters that are entered at a MAP terminal are shown in uppercase letters:

>BSY CTRL

Variables

Variables are shown in lowercase letters:

>BSY CTRL ctrl_no

The letters or numbers that the variable represents must be entered. Each variable is explained in a list that follows the command string.

Responses

Responses correspond to the MAP display and are shown in a different type:

FP 3 Busy CTRL 0: Command request has been submitted.

FP 3 Busy CTRL 0: Command passed.

The following excerpt from a procedure shows the command syntax used in this document:

Manually busy the CTRL on the inactive plane by typing

>BSY CTRL ctrl_no

and pressing the Enter key.

where

ctrl_no is the number of the CTRL (0 or 1)

Example of a MAP response:

FP 3 Busy CTRL 0: Command request has been submitted.

FP 3 Busy CTRL 0: Command passed.

Chapter 1 Release NA002

The information contained in this document has to do with changes, additions, or deleted information in reference to man-machine interface (MM) or commands for DMS-100 and DMS-200 in the North American software releases. This document is broken into two volumes. Volume 1 includes all releases prior to NA005; and Volume 2 includes release NA005 and NA006.

This chapter, NA002, includes information appropriate for the following product computing module loads (PCLs): LEC002, LET002 and CDN002.

For information on commands for the Signaling Transfer Point (STP) product, refer to *SuperNode Signaling Transfer Point Maintenance Guide*, 297-8101-541. For information on commands for the DMS SuperNode Service Control Point (SCP) product, refer to *SuperNode Service Control Point II Maintenance Guide*, 297-5131-541

AD6712mm.ab04

Directories

PLEASE NOTE: The HBSXFER directory (detailed below) was introduced as part of a BCS36 Patch (Feature AD6516), and it is included here only because this feature introduces this software as a packageable entity (i.e. this feature propagates the patch). Only the HBSMTD directory is introduced by this feature.

The implementation of the Hybrid Billing Server adds two new CI directories: HBSMTD and HBSXFER.

Table of New / Modified Directories

PLEASE NOTE: The HBSXFER directory is *not* new to this feature.

Table 1-1 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED, DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
HBSMTD	New	N/A	SuperNode	RES
HBSXFER	New	N/A	SuperNode	RES

Accessing Directory: HBSMTD

To Access

```
CI:  
>HBSMTD
```

To Return to CI

```
HBSMTD  
> quit
```

Accessing Directory: HBSXFER

To Access

```
CI:  
> HBSXFER
```

To Return to CI

```
HBSXFER:  
> quit
```

Commands

Table of New / Modified Commands

PLEASE NOTE: The LBKUP and CBKUP HBSXFER commands were introduced as part of a BCS36 Patch (Feature AD6516), and are included here only because this feature introduces this software as a packageable entity (i.e.

this feature propagates the patch). *Only* the HBSMTD commands are introduced by this feature.

Table 1-20 New/Modified Commands

COMMAND NAME	NEW, CHANGED, DELETED	NEW NAME (if renamed)	DIRECTORY NAME
ACT	New	N/A	HBSMTD
DEACT	New	N/A	HBSMTD
QXFER	New	N/A	HBSMTD
NEXTVOL	New	N/A	HBSMTD
HELP	New	N/A	HBSMTD
LBKUP	New	N/A	HBSXFER
CBKUP	New	N/A	HBSXFER

Command Name: ACT

Command Type

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The ACT command resides in the HBSMTD directory, and it is responsible for initiating activation of the MTD Data Spooler.

The Spooler must be activated when either of the these events have occurred:

- The Spooler is deactivated manually by a craftsperson.
- The switch is re-booted from an initial image.

NOTE: Restart-dependent datafill changes which render the Spooler inoperable ***do not*** require manual activation. If previously activated, and if a

successive restart corrects the dependent datafill, the Spooler automatically reactivates.

If the MTD Data Spooler is already active, the ACT command is ignored. If a previous DEACT command (with no FORCE option) has been executed, and a file is currently in transit to the target device, the ACT command will negate the Pending Deactivation.

A DIRP101 log is issued when the ACT command is executed and successful. Reference the LG section of this DDOC for further information on this log. If activation fails, the craftsperson is notified by the ACT command response at the terminal.

Warning

None.

Command Syntax

act

Parameter Definitions

The ACT command has no parameters.

Table 1-30 ACT Parameter Definitions

PARAMETER	VALUE	DEFINITION
N/A	N/A	N/A

Responses

The following message is displayed at the terminal when the ACT command executes successfully:

HBS File Transfer has been activated.

In addition, a corresponding DIRP101 log is issued.

The following message is displayed at the terminal when the ACT command is unable to execute successfully:

Unable to activate HBS File Transfer!

Additionally, a reason is given:

- There is missing datafill.
- An internal resource error occurred.

Notes

None.

Examples

An example of each response is given:

1. This example shows successful activation.

HBSMTD:

> act

HBS File Transfer has been activated.

2. This example shows unsuccessful activation due to missing datafill.

HBSMTD:

> act

Unable to activate HBS File Transfer!
Check for missing datafill.

3. This example shows unsuccessful activation due to a SOS error.

HBSMTD:

> act

Unable to activate HBS File Transfer!
Internal resource error (rc: 2).

Note: The "rc" value is a return code needed for debugging purposes. This failure reason should not normally occur. Additionally, a SWER is generated.

Command Name: DEACT

Command Type

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The DEACT command resides in the HBSMTD directory, and its purpose is to halt HBS file transfer from the source FTFS device(s) to the target DPP, 9-Track tape or BMC device(s).

WARNING: File transfer will **not** resume until the ACT command has been entered (see above).

A DIRP101 log is issued when the DEACT command is executed. Reference the LG section of this DDOC for further information on this log.

Normally, the DEACT command will complete transfer of the current file before entering its dormant state. If immediate shutdown is required, a FORCE option is provided.

When the DEACT command is entered, the user is presented with a YES/NO prompt and a warning message.

Warning

During the time that HBS file transfer to the MTD is deactivated, NO BILLING DATA IS SENT TO THE TARGET DEVICE.

Command Syntax

```
deact <force>
```

Parameter Definitions

The FORCE option indicates that immediate shutdown of file transfer is desired.

Table 1-40 DEACT Parameter Definitions

PARAMETER	VALUE	DEFINITION
FORCE	String	Optional

Responses

The following warning message is displayed at the terminal when a DPP is the selected target device, and the user has entered the DEACT command with no options:

WARNING: File Transfer to the DPP will be DEACTIVATED when the current file completes transfer!

Please confirm ("YES", "Y", "NO", or "N"):

The following warning message is displayed at the terminal when a DPP is the selected target device, and the user has entered the DEACT command with the FORCE option:

WARNING: File Transfer to the DPP will be DEACTIVATED immediately!

Please confirm ("YES", "Y", "NO", or "N"):

The following warning message is displayed at the terminal when 9-Track tape is the selected target device, and the user has entered the DEACT command with no options:

WARNING: File Transfer to TAPE will be DEACTIVATED when the current file completes transfer!

Please confirm ("YES", "Y", "NO", or "N"):

The following warning message is displayed at the terminal when 9-Track tape is the selected target device, and the user has entered the DEACT command with the FORCE option:

WARNING: File Transfer to TAPE will be DEACTIVATED immediately!

Please confirm ("YES", "Y", "NO", or "N"):

If a YES reply is selected for any of the above Y/N prompts, one or both of these responses will be displayed at the terminal:

Given the current file transfer rate, deactivation will occur in <n> minutes.

Use the ACT command to re-initiate File Transfer.

In addition, a YES reply triggers the corresponding DIRP101 log.

Notes

None.

Examples

An example of each response is shown below.

1. This example shows the output of a DEACT command when **no** file is currently in transit.

HBSMTD:
> deact

WARNING: File Transfer to TAPE will be DEACTIVATED immediately!

Please confirm ("YES", "Y", "NO", or "N"):

> YES

Use the ACT command to re-initiate File Transfer.

2. This example shows the output of a DEACT command when a file *is* currently in transit.

HBSMTD:

> deact

WARNING: File Transfer to the DPP will be DEACTIVATED when the current file completes transfer!

Please confirm ("YES", "Y", "NO", or "N"):

> YES

Given the current file transfer rate, deactivation will occur in 8 minutes.

Use the ACT command to re-initiate File Transfer.

3. This example shows the output of a DEACT command when the FORCE option is used.

HBSMTD:

> deact force

WARNING: File Transfer to TAPE will be DEACTIVATED immediately!

Please confirm ("YES", "Y", "NO", or "N"):

> YES

Use the ACT command to re-initiate File Transfer.

Command Name: QXFER

Command Type

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The QXFER command resides in the HBSMTD directory, and it provides current Data Spooler status information. The following data is displayed:

- SPOOLER STATUS

This will be one of the following:

- ***Transferring***

The Spooler is currently transferring a file to the target DPP or 9-Track tape device.

- ***Idle: No Files***

The Spooler is waiting for files to transfer.

- ***Idle: No Devices***

The Spooler is waiting for target devices to be mounted in table DIRPPPOOL.

- ***Idle: Selecting Source File***

The Spooler is Idle because it is selecting a source file for transfer.

- ***Idle: Checking Volume States***

The Spooler is Idle because it is verifying the states of the target volumes. This is a normal, periodic sanity check.

- ***Idle: Opening Target File***

The Spooler is Idle because it is opening a file on the target MTD. When the mounted target devices are DPP MTDs, this state is seldom observed due to the expedient response of the device. However, it can take several minutes to open a file on a 9-Track tape.

- ***Idle: Closing Target File***

The Spooler is Idle because it is closing a file on the target MTD. When the mounted target devices are DPP MTDs, this state is seldom observed due to the expedient response of the device. However, it can take several seconds to close a file on a 9-Track tape.

- ***Idle: Recovering Target Volume***

The Spooler is Idle because it is recovering the target volume. Since this is a transient state, it should not persist. If this state is seen frequently, the user should check the DIRP101 logs for additional diagnostic information.

- ***Idle: End of Target Medium***

The Spooler is Idle because it has reached the end of the target volume medium, and no volumes with free space exist.

- ***Idle: Rotating Target Volume***

The Spooler is Idle because it is rotating to another volume. Since this is a transient state, it should not persist. If this state is seen frequently, the user should check the DIRP101 logs for additional diagnostic information.

- ***Rotate-Pending***

The Spooler is currently transferring a file, and a NEXTVOL request has been issued. When file transfer completes, the Spooler will migrate another available target volume.

- ***Deactivate-Pending***

The Spooler has been manually deactivated (without use of the FORCE option), and it will enter the Deactivate state when the current file completes transfer.

- ***Deactivated***

The Spooler process is deactivated.

- ***FILE IN TRANSIT***

This is the name of the source (and target) file currently in transit. The information will only be displayed if the Spooler is in a Transferring or Paused state.

- ***SOURCE VOLUME***

This is the name of the volume where the source file resides.

- ***TARGET DEVICE & VOLUME***

This is the name of the target device type (DPP or TAPE), and the volume name (as mounted in table DIRPPPOOL).

- ***TRANSFER INITIATION TIME***

This is the date and time at which transfer began.

- ***CURRENT TIME***

This is the current date and time.

- ***FILE SIZE***

This is the size of the source file in KB.

- *SOURCE BYTES READ*

This is the number of bytes read from the source file as measured in KB.

- *AMA DATA WRITTEN*

Since the file system packs variable block AMA data in 2K storage blocks before writing them to disk, this field shows the number of valid AMA data bytes actually written to the target MTD device (with the filler-bytes removed). This value is displayed in KB.

- *TRANSFER RATE*

This is the current transfer rate as measured in KB/Hour.

- *ESTIMATED COMPLETION*

Given the file transfer rate, this is the estimated amount of time (in minutes) remaining before completion.

Warning

Not Applicable.

Command Syntax

qxfer

Parameter Definitions

Table 1-50 QXFER Parameter Definitions

PARAMETER	VALUE	DEFINITION
N/A	N/A	N/A

The QXFER command has no parameters.

Responses

As detailed above, the Spooler status information is displayed.

Notes

None.

Examples

Here are examples of output.

1. In this example, assume a file is In-Transit.

HBSMTD:

> qxfer

```
Status ..... Transferring
File In-Transit ..... RN940317083001AMA
Source Volume ..... FP0/FP0SS0AMA
Target Device ..... DPP Volume T5
Xfer Initiated ..... 94/03/17 @ 08:40:20
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... 5,000 KB
```

```
Source Bytes Read ..... 3,000 KB
AMA Data Written ..... 2,975 KB
Transfer Rate ..... 18,000 KB/Hr
Estimated Completion .....approximately 7 minutes
```

Diagnosis: The file, RN940317083001AMA, is currently in transit from device FP0SS0AMA on FP0 to a DPP mounted in DIRPPPOOL as T5. Transfer began at 8:40:20 on March 17, 1994. Three megabytes of data have been read, and 2.975 megabytes of AMA data have been transferred since transfer began (10 minutes earlier) at a rate of 18 megabytes per hour. The file is 5 megabytes in size, and transfer should complete in 6-7 minutes.

2. This example shows the display when there are no files available for transfer.

HBSMTD:

> qxfer

```
Status ..... Idle: No Files
File In-Transit ..... -
Source Volume ..... -
Target Device ..... DPP Volume T5
Xfer Initiated ..... -
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... -
Source Bytes Read ..... -
AMA Data Written ..... -
Transfer Rate ..... -
Estimated Completion .....-
```

Diagnosis: The Spooler is idle because there are no "Retained" (R) files available for transfer to the DPP mounted in DIRPPPOOL as T5.

3. Example 3 shows the terminal display when there are no devices mounted in table DIRPPPOOL.

HBSMTD:

> qxfer

```
Status ..... Idle: No Devices
File In-Transit ..... -
Source Volume ..... -
Target Device ..... -
Xfer Initiated ..... -
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... -
Source Bytes Read ..... -
AMA Data Written ..... -
Transfer Rate ..... -
Estimated Completion .....-
```

Diagnosis: The Spooler is idle because there are devices mounted in table DIRPPPOOL.

4. This example shows the terminal display when the Spooler is the target volume states.

HBSMTD:

> qxfer

```
Status ..... Idle: Checking Volume States
File In-Transit ..... -
Source Volume ..... -
Target Device ..... DPP Volume T5
Xfer Initiated ..... -
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... -
Source Bytes Read ..... -
AMA Data Written ..... -
Transfer Rate ..... -
Estimated Completion ..... -
```

Diagnosis: The Spooler is idle because it is checking the target volume states. This is a normal, periodic spooler sanity check.

5. This example shows the terminal display when the Spooler is selecting a file to transfer.

HBSMTD:

> qxfer

```
Status ..... Idle: Selecting Source File
File In-Transit ..... -
Source Volume ..... -
Target Device ..... DPP Volume T5
Xfer Initiated ..... -
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... -
Source Bytes Read ..... -
AMA Data Written ..... -
Transfer Rate ..... -
Estimated Completion ..... -
```

Diagnosis: The Spooler is idle because it is selecting a "Retained" file to transfer to the target volume.

6. The following example shows QXFER output when the Spooler is recovering a target volume.

HBSMTD:

> qxfer

```
Status ..... Idle: Recovering Target Volume
File In-Transit ..... RN940317083001AMA
Source Volume ..... :FP0/FP0SS0AMA
Target Device ..... DPP Volume T5
Xfer Initiated ..... 94/03/17 @ 08:40:20
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... 5,000 KB
```

```

Source Bytes Read ..... 3,000 KB
AMA Data Written ..... 2,975 KB
Transfer Rate ..... -
Estimated Completion .... -

```

Diagnosis: The file, RN940317083001AMA, is in-transit from device FP0SS0AMA on FP0 to a DPP mounted in DIRPPPOOL as T5. Transfer began at 8:40:20 on March 17, 1994. Three megabytes of data have been read, and 2.975 megabytes of AMA data have been transferred since transfer began (10 minutes earlier). A fault has occurred on the target device, and the Spooler is currently recovering the volume.

7. The following example shows terminal output when the Spooler is rotating to a new target volume.

HBSMTD:

> qxfer

```

Status ..... Idle: Rotating Target Volume
File In-Transit ..... RN940317083001AMA
Source Volume ..... :FP0/FP0SS0AMA
Target Device ..... DPP Volume T5
Xfer Initiated ..... 94/03/17 @ 08:40:20
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... 5,000 KB
Source Bytes Read ..... 3,000 KB
AMA Data Written ..... 2,975 KB
Transfer Rate ..... -
Estimated Completion .....-

```

Diagnosis: The file, RN940317083001AMA, is in-transit from device FP0SS0AMA on FP0 to a 9-Track Tape mounted in DIRPPPOOL. Transfer began at 8:40:20 on March 17, 1994. Three megabytes of data have been read from the source file, and 2.975 megabytes for AMA data have been transferred since transfer began (10 minutes earlier). The target device is recovering from a fault, and the Spooler is currently rotating to another tape volume.

8. In this example, a NEXTVOL request has been submitted. At the time of the NEXTVOL, a file was in transit.

HBSMTD:

> qxfer

```

Status ..... Rotate-Pending
File In-Transit ..... RN940317083001AMA
Source Volume ..... :FP0/FP0SS0AMA
Target Device ..... DPP Volume T5
Xfer Initiated ..... 94/03/17 @ 08:40:20
Current Time ..... 94/03/17 @ 08:50:20
File Size ..... 5,000 KB
Source Bytes Read ..... 3,000 KB
AMA Data Written ..... 2,975 KB

```

Transfer Rate 18,000 KB/Hr
 Estimated Completion ... approximately 7 minutes

Diagnosis: The file, RN940317083001AMA, is currently in-transit from device FP0SS0AMA on FP0 to a DPP mounted in DIRPPPOOL as T5. Transfer began at 8:40:20 on March 17, 1994. Three megabytes of data have been read from the source file, and 2.975 megabytes of AMA data have been transferred since transfer began (10 minutes earlier) at a rate of 18 megabytes per hour. The MTD Data Spooler will rotate to another target volume when transfer for this file has been completed (about 7 minutes).

9. In this example, a DEACT request has been submitted without use of the FORCE option. At the time of the DEACT, a file is was in transit.

HBSMTD:

> qxfer

Status Deactivate-Pending
 File In-Transit RN940317083001AMA
 Source Volume :FP0/FP0SS0AMA
 Target Device DPP Volume T5
 Xfer Initiated 94/03/17 @ 08:40:20
 Current Time 94/03/17 @ 08:50:20
 File Size 5,000 KB
 Source Bytes Read 3,000 KB
 AMA Data Written 2,975 KB
 Transfer Rate 18,000 KB/Hr
 Estimated Completion ... approximately 7 minutes

Diagnosis: The file, RN940317083001AMA, is currently in-transit from device FP0SS0AMA on FP0 to a DPP mounted in DIRPPPOOL as T5. Transfer began at 8:40:20 on March 17, 1994. Three megabytes of data have been read from the source file, and 2.975 megabytes of AMA data have been transferred since transfer began (10 minutes earlier) at a rate of 18 megabytes per hour. The MTD Data Spooler will Deactivate when transfer for this file has been completed (about 7 minutes).

1. The following example shows output from the QXFER command when then MTD Data Spooler is Deactivated.

HBSMTD:

> qxfer

Status Deactivated
 File In-Transit -
 Source Volume -
 Target Device -
 Xfer Initiated -
 Current Time 94/03/17 @ 08:50:20
 File Size -
 Source Bytes Read -
 AMA Data Written -

Transfer Rate -
Estimated Completion ... -

Command Name: NEXTVOL**Command Type**

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The NEXTVOL command resides in the HBSMTD directory, and it provides the craftsperson with the ability to manually rotate to another target device (if one is available).

Normally, the MTD Data Spooler will not rotate to a new target device until the current file transfer has completed. If no file is in-transit, the rotate occurs immediately. However, applying the FORCE option will cause the MTD Data Spooler to rotate immediately, even if a file is in-transit.

A NEXTVOL request will fail if:

- There there are no target volume available.
- The current volume is the only available volume.

Warning

Not Applicable.

Command Syntax

NEXTVOL

Parameter Definitions

Table 1-60 NEXTVOL Parameter Definitions

PARAMETER	VALUE	DEFINITION
FORCE	String	Optional

The FORCE option indicates that an immediate target volume rotate is desired.

Responses

If there are no files in transit or the FORCE option is applied, and there are target volumes available, the following message is displayed at the terminal:

Rotate successful to <device> Volume <name>.

If there is a file in-transit, and there are target volumes available, the following message is displayed at the terminal:

Given the current file transfer rate, a Rotate to <device> Volume <name> will occur in <n> minutes.

If there are no target volumes available, the following message is displayed at the terminal:

There are no target volumes available for Rotation.

Notes

None.

Examples

HBSMTD:
> NEXTVOL

Given the current file transfer rate, a Rotate to DPP Volume T5 will occur in 7 minutes.

Command Name: HELP

Command Type

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The HELP command resides in the HBSMTD directory, and it provides the craftsperson with a summary of the available commands and their purpose.

Additionally, the name of any HBSMTD command may be included as a parameter for the HELP command. If a parameter is supplied, help specific to that command is provided.

Warning

Not Applicable.

Command Syntax

help <context>

Parameter Definitions

Table 1-70 HELP Parameter Definitions

PARAMETER	VALUE	DEFINITION
ACT	String	Optional
DEACT	String	Optional
QXFER	String	Optional
NEXTVOL	String	Optional
HELP	String	Optional
QUIT	String	Optional

The HELP command has six parameters (one for each command in the HBSMTD directory).

Responses

When the HELP command is executed, a summary of the available commands and their purpose is displayed on the terminal.

If the name of another HBSMTD command is supplied as a parameter to the help command, context specific help is supplied.

Notes

None.

Examples

1. This example shows terminal output when the HELP command is entered with no parameters.

```
HBSMTD:  
> help
```

Summary of HBSMTD Spooler Commands:

ACT	Activates the HBS DPP/9-Track Tape Spooler.
DEACT	Deactivates the HBS DPP/9-Track Tape Spooler.
QXFER	Queries the state of the HBS Spooler.
NEXTVOL	Skips to the next available Target Volume.
HELP	This Help Screen.
QUIT	Exits the HBSMTD directory.

Enter "help <command name>" for more information.

2. This example shows terminal output when HELP for the QUIT command is requested.

```
HBSMTD:  
> help quit
```

Syntax: QUIT [all]

Purpose: The QUIT command is used to exit the HBSMTD Command Directory.

Options: ALL Exits All Directories

Command Name: LBKUP

PLEASE NOTE: The LBKUP command is an element of the HBSXFER command directory, and it was introduced as part of a BCS36 Patch (Feature AD6516). It is included here only because this feature introduces this software as a packageable entity (i.e. this feature propagates the patch).

Command Type

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The LBKUP command resides in the HBSXFER directory, and its purpose is to list files that the XFER process has requested for tape backup.

Tape backup functionality is implemented by the DRM MAP level command, TCOPY.

Warning

Not Applicable.

Command Syntax

lbkup [num]

Parameter Definitions

Table 1-80 LBKUP Parameter Definitions

PARAMETER	VALUE	DEFINITION
NUM	{0 TO 99}	Optional

The optional NUM parameter may be used to indicate the maximum number of files to display in the file list. If no NUM parameter is specified, all files are displayed.

Responses

A list of files is displayed on the terminal. The following is an example of display output:

```
$$931114150821AMA  
$$931112094500AMA  
$$931113221834AMA  
$$931112103001AMA
```

Notes

The "\$\$" characters in the displayed file names represent "wild cards" for the dynamic File State and Backup State characters of the file name. The "\$" character may be used as a "wild card" character for tape backup requests issued by the DRM TCOPY command.

Examples

HBSXFER:

> lbkup 4

\$\$931114150821AMA

\$\$931112094500AMA

\$\$931113221834AMA

\$\$931112103001AMA

Command Name: CBKUP

PLEASE NOTE: The CBKUP command is an element of the HBSXFER command directory, and it was introduced as part of a BCS36 Patch (Feature AD6516). It is included here only because this feature introduces this software as a packageable entity (i.e. this feature propagates the patch).

Command Type

NON-MENU

Command Target

SuperNode

Command Availability

RES

Command Description

The CBKUP command resides in the HBSXFER directory, and its purpose is to clear an entry from the list of files that the XFER process has requested for tape backup.

Tape backup functionality is implemented by the DRM MAP level command, TCOPY.

Warning

Not Applicable.

Command Syntax

cbkup <file>

Parameter Definitions

Table 1-90 CBKUP Parameter Definitions

PARAMETER	VALUE	DEFINITION
FILE	STRING	Non-Optional

The non-optional FILE parameter indicates the file to remove from the list of files that the XFER process has requested for tape backup.

Responses

After successful entry of the CBKUP command, the file indicated by the FILENAME parameter is removed from the list of files specified for backup to tape.

The HBSB alarm (see "1.1.3 Alarms", below) is affected as a result of clearing files from the backup list.

Output Messages

NO FILE SPECIFIED

This message is displayed if the user did not specify a file name.

SIZE OF FILE NAME INVALID

This message is displayed if the user specified an invalid number of filename characters. The file should be entered exactly as it appears in the display from the LBKUP command (see above).

It is extremely unlikely this message will ever be displayed.

FAILED TO GET SEMA

This message is displayed if HBSXFER could not gain write access to the internal list of files for backup. It is extremely unlikely this message will ever be displayed.

WARNING: COULD NOT MARK FILE AS PROCESSED

This message is displayed if HBSXFER could not mark the file as processed. It is extremely unlikely this message will ever be displayed.

FILE HAS BEEN MARKED AS PROCESSED

This message is the normal message displayed when the CBKUP command is successful.

REQUEST INVALID

This message indicates that the specified file name could not be found in the list of files selected for backup.

Notes

The CBKUP command should not be used if the corresponding file has not been backed-up to tape. Doing so defeats the purpose of the XFER request for file backup.

Examples

HBSXFER:

> lbkup 4

\$\$931114150821AMA

\$\$931112094500AMA

\$\$931113221834AMA

\$\$931112103001AMA

> cbkup \$\$931113221834AMA

> FILE HAS BEEN MARKED AS PROCESSED.

Alarms

PLEASE NOTE: The HBSB Alarm was introduced as part of a BCS36 Patch (Feature AD6516). It is included here only because this feature introduces this software as a packageable entity (i.e. this feature propagates the patch). This alarm is **not** added by this feature, and it should already be documented in the appropriate NTP(s).

Alarm Name: HBS Backup Request (HBSB)

The HBSB alarm is posted in the position of the existing XFER alarm field (in the XFER MAP level).

Alarm Display Format

HBSBnn where "nn" refers to the number of files currently requiring tape backup. The range of nn is from 01 to 00 (1 to 100).

Conditions Required to Raise the Alarm

When the XFER host requests a file be backed-up to tape, an HBSB alarm is raised. The alarm indicates the number of files currently requested for backup (see "Alarm Display Format", above).

Duration of the Alarm

The HBSB alarm will remain until all files in the backup list have been cleared. As each file in the backup list is cleared, the number of files indicated by the alarm is updated (see "Alarm Display Format", above).

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Directories

Table 1-100 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
IDTDIR	CHANGED	SUPERN	ODE	RES

Accessing directory: IDTDIR

To access

MAPCI;MTC;PM
 - POST IDT idt_number
 - POST IDT ALL
 - POST IDT ISTB

To return to CI

QUIT ALL

Commands

Table of New/modified commands

Table 1-110 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QueryPM	Changed		IDTDIR

Command name:

QueryPM (using FLT option as action parameter).

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The QueryPM command with the optional FLT parameter displays a list of faults that exist on the posted IDT.

Warning

Not Applicable.

Command syntax

Syntax has not changed.

Parameter definitions

Table 1-120 QUERYPM Parameter Definitions

PARAMETER	VALUE	DEFINITION

Parameters have not changed.

Responses

Two new responses have been added to this command/parameter combination.

Response

1. Maintenance connection: Permanent rejection
2. Maintenance connection: Transient rejection

Explanation:

1. An attempt to establish an IDT nailup association to the corresponding RDT has received a rejected permanent response from the RDT. This implies that a communication incompatibility exists between the DMS and the corresponding RDT with respect to the association context.
2. An attempt to establish an IDT nailup association to the corresponding RDT has received a rejected transient response from the RDT. This indicates a temporary problem encountered while attempting to setup an IDT association, such as lack of resources.

This response is visible on the SuperNode.

System action:

1. The system will re-attempt to establish the IDT association provided there is an InSv, Active EOC path on the IDT .
2. The system will re-attempt to establish the IDT association provided there is an InSv, Active EOC path on the IDT .

User action:

1. This ISTB reason implies that a communication incompatibility exists between the DMS and the corresponding RDT with respect to association context. Most likely the problem is due to the DMS and RDT having incompatible versions of the software that supports the EOC stack and/or the application interface. In order to correct this incompatibility, either the DMS or the RDT must be updated with a load that is in line with the other end with respect to association context support. Once this incompatibility has been corrected, the association establishment attempt should be successful within 30 minutes of correcting the incompatibility.. However, one of the following actions can be performed to manually initiate the association establishment attempt on the IDT :
 - the IDT is OffL and then returned to ManB
 - all EOC paths on the IDT are Bsy-ed and Rts-ed, such that an InSv, Active EOC path exists
2. The transient case implies a temporary condition, whereby the system re-attempts to establish the association, provided there is an InSv, Active EOC path on the IDT. One of the above actions listed under 1) User action for the Permanent_reject condition can be attempted to manually initiate the association establishment attempt.

In both cases, verify that an InSv, Active EOC path exists on the IDT - if an InSv, EOC path exists and association establishment is not restored within 30 minutes, then TAS should be contacted.

Notes

Not Applicable.

Examples

CC	CMC	IOD	Net	PM	CCS	LnS	Trks	Ext
.	.	.	.	.	.	.	.	.
IDT			SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM	0	2	8	1	3	10
2 Post		IDT	0	1	3	1	2	3
3								
4								
5 Trnsl		IDT 23		ISTb		Links_OOS:0		
6								
7 Bsy		QueryPM flt						
8 RTS		ISTb Reasons:						
9 OffL		Maintenance connection: Permanent Rejection						
10								
11 Disp_								
12 Next								
13								
14 QueryPM								
15								
16								
17								
18								
A								
Time 15:32								

CC	CMC	IOD	Net	PM	CCS	LnS	Trks	Ext
.	.	.	.	.	.	.	.	.
IDT			SysB	ManB	OffL	CBsy	ISTb	InSv
0	Quit	PM	0	2	8	1	3	10
2	Post	IDT	0	1	3	1	2	3
3								
4								
5	Trnsl	IDT 23		ISTb		Links_OOS:0		
6								
7	Bsy	QueryPM flt						
8	RTS	ISTb Reasons:						
9	OffL	Maintenance connection: Transient Rejection						
10								
11	Disp_							
12	Next							
13								
14	QueryPM							
15								
16								
17								
18								
A								
Time 15:32								

Alarms

Alarm name:

Not Applicable.

Conditions required to raise the alarm

Not Applicable.

Duration of the alarm

Not Applicable.

AF5341mm.aa05**Directories****Table of new/modified directories****Table 1-130 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
EXT	CHANGED		BOTH	RES
IDTDIR	CHANGED		SUPER- NODE	RES

Accessing directory:EXT**To access**

MAPCI;MTC;EXT

To return to CI

QUIT ALL

Accessing directory:IDTDIR**To access**

MAPCI;MTC;PM;POST IDT <n>

To return to CI

QUIT ALL

Commands

Table of New/modified commands

Table 1-140 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
DISP	CHANGED		EXT
LIST	CHANGED		EXT
SETSD	CHANGED		EXT
SETSC	CHANGED		EXT
QUERYPM	CHANGED		IDTDIR

Command name:DISP

Command type

MENU

Command target

BOTH

Command availability

RES

Command description

This command displays static and dynamic data retained for scan functions, software alarms, and SD functions. This command is modified to support the new SD functions, "RDTACO" and "RDTWARN", and the new scan function, "RDTWRN".

Warning

None.

Command syntax

DISP - DISPLAY OF SCAN POINT AND SD POINT DATA

Parms: <FUNCTION> {SC [<INDEX> {0 to 1023}],
SD [<INDEX> {0 TO 1023}],
SCF <OAU_SCAN_FUNCT_DESIG> STRING,
SDF <OAU_SD_FUNCT_DESIG> STRING,
WHATACT <OAU_SD_FUNCT_DESIG> STRING,
COUNTS,
SCALARM,
SDALARM,
SCG [<INDEX> {0 TO 255}],
SDG [<INDEX> {0 TO 255}],
LV [<ALARM> {ACTIVE}]}

Parameter definitions

Table 1-150 DISP Parameter Definitions

PARAMETER	VALUE	DEFINITION
SC	{0 TO 1023}	To show the reference number of a scan function for which the craftsperson wishes to display information. Unchanged by this feature.
SD	{0 TO 1023}; predefined indices 58 and 59 are added	To show the reference number of an SD function for which the craftsperson wishes to display information.
SCF	Any valid scan function or software alarm name. Predefined software alarm "RDTWRN" is added.	To show the name of the scan function for which the craftsperson wishes to display information. Unchanged by this feature.
SDF	Any valid SD function name. Predefined names "RDTACO" and "RDTWARN" are added.	To show the name of the SD function for which the craftsperson wishes to display information.
SDALARM		To show the SD points currently in an alarm state. "RDTACO" and "RDTWARN" are added to the list of possible responses.

Table 1-150 DISP Parameter Definitions

PARAMETER	VALUE	DEFINITION
SCALARM		To show the scan points and software alarms currently in an alarm state. "RDTWRN" is added to the list of possible responses.
WHATACT	Any valid SD function name. Predefined names "RDTACO" and "RDTWARN" are added.	To show which scan function or software alarm activates a given SD point. "RDTWRN" is added to the list of possible responses.

Responses

The following examples show the new possible responses from the DISPcommand.

Response 1

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL						
.		.	.	1 IDT	.	.	.	.	3 Crit.						
				C	*C*										
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm							
0 Quit				3	0	1	0	1							
2		DISP SD 58													
3 Equip															
4															
5		SD Function: RDTWARN				index: 58									
6		grp: 5		point: 3		audible: NO		lamp: NO normal state: 0							
7 List_				Condition: ALARM		operated: 1		normal state: 0							
8 TstDSAlm															
9 SetSD_															
10 SetSC_															
11 Disp_															
12															
13 _Crit															
14 _FSP															
15 _Maj															
16 _Min															
17 _NoAlm															
18															
OPERATOR															
Time 14:35 >															

Explanation:

This indicates that the SD function with index 58 is the RDTWARN SD function. Information concerning the physical location and current state of the SD point is displayed.

System action:

None.

User action:

If the condition of this SD point is "ALARM", it indicates the presence of a warning-level alarm at an RDT. The alarm should be traced back to the RDT using one of three methods:

- Use the DISP SDALARM command to determine which of the coded RDT SD points (RDTSD1 - RDTSD8) are active. In table RDTINV, determine which RDT is datafilled to activate those SD points by checking the SDPOINTS field of each tuple.
- Go to the PM level of the MAP and look for RDTs that are in-service/trouble (ISTb) with the reason "RDT alarms present".
- Check for DMS logs RDT301 - RDT305 for alarm reports from the RDT.

Refer to features AF2444 and AF3798 for more details on these tracking methods.

Response 2

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	

EXT	Ext Alarms	Crit	FSP	Major	Minor	NoAlm
0 Quit		3	0	1	0	1
2	DISP SF RDTWARN index: 58					
3 Equip						
4						
5	SD Function: RDTWARN index: 58					
6	grp: 5 point: 3 audible: NO lamp: NO normal state: 0					
7 List_	Condition: ALARM operated: 1					
8 TstDSAlm						
9 SetSD_						
10 SetSC_						
11 Disp_						
12						
13 _Crit						
14 _FSP						
15 _Maj						
16 _Min						
17 _NoAlm						
18						

OPERATOR
Time 14:35 >

Response 3

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1IDT	.	.	.	3Crit	.
				C					
								C	
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm	
				3	0	1	0	1	
0 Quit									
2		DISP WHATACT RDTWARN							
3 Equip									
4									
5		Potential scan points that activate: RDTWARN							
6		RDTWARN							
7 List_									
8 TstDSAlm									
9 SetSD_									
10 SetSC_									
11 Disp_									
12									
13 _Crit									
14 _FSP									
15 _Maj									
16 _Min									
17 _NoAlm									
18									
OPERATOR									
Time 14:35 >									

Explanation:

This displays the list of scan points or software alarms that are datafilled to activate RDTWARN. Normally, this should only be the software alarm "RDTWRN". (This is similar to the other severity-indicating RDT SD points: RDTCRIT should only be activated by RDTCRT, RDTMAJOR should only be activated by RDTMJ, and RDTMINOR should only be activated by RDTMN.) If other scan functions or software alarms are datafilled to activate any of the severity-indicating RDT SD points, the results can be unpredictable. The SD points may show inaccurate information.

System action:

None.

User action:

None.

Response 4

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C					
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm	
0 Quit				3	0	1	0	1	
2		DISP SD 59							
3 Equip									
4		SD Function: RDTACO		index: 59					
5		grp: 5		point: 4		audible: NO		lamp: NO	
6		Condition: normal				operated: NO			
7 List_									
8 TstDSAlm									
9 SetSD_									
10 SetSC_									
11 Disp_									
12									
13 _Crit									
14 _FSP									
15 _Maj									
16 _Min									
17 _NoAlm									
18									
OPERATOR									
Time 14:35 >									

Response 5

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm	
0	Quit			3	0	1	0	1	
2		DISP SDF RDTACO							
3	Equip								
4		SD Function: RDTACO index: 59							
5		grp: 5 point: 4 audible: NO lamp: NO normal state: 0							
6		Condition: normal operated: NO							
7	List_								
8	TstDSAlm								
9	SetSD_								
10	SetSC_								
11	Disp_								
12									
13	_Crit								
14	_FSP								
15	_Maj								
16	_Min								
17	_NoAlm								
18									
OPERATOR									
Time 14:35 >									

Explanation:

This displays information about the "RDTACO" SD function. Information concerning the physical location and current state of the SD point is displayed.

System action:

None.

User action:

If the condition of this SD point is "ALARM", it indicates that cutoff (disabled/masked) alarms are present at an RDT. The alarm can be reenabled by repeated use of the RDTALRMCO scan function. Refer to "1.3.2.14 Command name:SETSC" on page 53.

Response 6

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	
EXT	Ext Alarms			Crit	FSP	Major	Minor	NoAlm	
0	Quit			3	0	1	0	1	
2	DISP WHATACT RDTACO								
3	Equip	Potential scan points that activate: RDTACO							
4									
5									
6									
7	List_								
8	TstDSAlm								
9	SetSD_								
10	SetSC_								
11	Disp_								
12									
13	_Crit								
14	_FSP								
15	_Maj								
16	_Min								
17	_NoAlm								
18									
OPERATOR									
Time 14:35 >									

Explanation:

This displays the list of scan points or software alarms that are datafilled to activate RDTACO. Normally, NO scan points or software alarms should activate this point, since this point is controlled through software logic. If other scan functions or software alarms are datafilled to activate this SD point, the results can be unpredictable. The SD point may show inaccurate information.

System action:

None.

User action:

None.

Response 7

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext APPL
.	.	..	...	1 IDT	.	.	.	3Crit .
				C				*C*
EXT			Ext Alarms	Crit	FSP	Major	Minor	NoAlm
				3	0	1	0	1
0 Quit								
2			DISP SC 45					
3 Equip								
4			SCAN Function: RDTWN			index: 45		
5			grp index: 2			no physical group		
assigned								
6			point: 2	rep: NO	special: NO	alarm: NA		
sfw: YES								
7 List_			condition: ALARM	scan state: 1	normal state:			
0								
8 TstDSAlm				SDs to activate almgrp almxfr				
9 SetSD_				RDTWARN				
10 SetSC_								
11 Disp_								
12								
13 _Crit								
14 _FSP								
15 _Maj								
16 _Min								
17 _NoAlm								
18								
OPERATOR								
Time 14:35 >								

Explanation:

This indicates that the scan function with index 45 is the RDTWRN softwarealarm. Information concerning the logic and current state of the alarm is displayed.

System action:

None.

User action:

If the condition of this SD point is "ALARM", it indicates the presence of a warning-level alarm at an RDT. The alarm should be traced back to the RDT using one of three methods:

- Use the DISP SDALARM command to determine which of the coded RDT SD points (RDTSD1 - RDTSD8) are active. In table RDTINV, determine which RDT is datafilled to activate those SD points by checking the SDPOINTS field of each tuple.
- Go to the PM level of the MAP and look for RDTs that are in-service/trouble (ISTb) with the reason "RDT alarms present".
- Check for DMS logs RDT301 - RDT305 for alarm reports from the RDT.

Refer to features AF2444 and AF3798 for more details on these tracking methods.

Response 8

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	
EXT									
Ext Alarms				Crit	FSP	Major	Minor	NoAlm	
				3	0	1	0	1	
0	Quit								
2	DISP SCF RDTWRN								
3	Equip								
4	SCAN Function: RDTWN index: 45								
5	grp index: 2 no physical group assigned								
6	point: 2 rep: NO special: NO alarm: NA sfw: YES								
7	List_ condition: ALARM scan state: 1 normal state: 0								
8	TstDSAlm SDs to activate almgrp almxfr								
9	SetSD_ RDTWARN								
10	SetSC_								
11	Disp_								
12									
13	_Crit								
14	_FSP								
15	_Maj								
16	_Min								
17	_NoAlm								
18									
OPERATOR									
Time 14:35 >									

Explanation:

This displays information about the "RDTWRN" software alarm. Information concerning the logic and current state of the alarm is displayed.

System action:

None.

User action:

If the condition of this SD point is "ALARM", it indicates the presence of a warning-level alarm at an RDT. The alarm should be traced back to the RDT using one of three methods:

- Use the DISP SDALARM command to determine which of the coded RDT SD points (RDTSD1 - RDTSD8) are active. In table RDTINV, determine which RDT is datafilled to activate those SD points by checking the SDPOINTS field of each tuple.

- Go to the PM level of the MAP and look for RDTs that are in-service/trouble (ISTb) with the reason "RDT alarms present".
- Check for DMS logs RDT301 - RDT305 for alarm reports from the RDT.

Refer to features AF2444 and AF3798 for more details on these tracking methods.

Response 9

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm	
0 Quit				3	0	1	0	1	
2		DISP SDALARM							
3 Equip									
4		SD POINTS IN ALARM STATE:							
5				CRALMVIS	1				
6				CRALMAUD	1				
7 List_				RDTSD8	1				
8 TstDSAlm				RDTSD1	1				
9 SetSD_				RDTCRIT	1				
10 SetSC_				RDTMAJOR	1				
11 Disp_				RDTWARN	1				
12									
13 _Crit									
14 _FSP									
15 _Maj									
16 _Min									
17 _NoAlm									
18									
OPERATOR									
Time 14:35 >									

Explanation:

The "RDTCRIT" and "RDTMAJOR" SD points, and the new "RDTWARN" SD point, indicate that critical, major, and warning alarms exist at an RDT. The RDT datafiled to activate the coded SD points "RDTSD1" and "RDTSD8" is the one with the alarms. "RDTACO" may now also be displayed by this command, if cut-off RDT alarms are active.

System action:

None.

User action:

If RDT alarms exist, use the alarm tracking procedures described later in this document. The alarm should be traced back to the RDT using one of three methods:

- Use the DISP SDALARM command to determine which of the coded RDT SD points (RDTSD1 - RDTSD8) are active. In table RDTINV, determine which RDT is datafilled to activate those SD points by checking the SDPOINTS field of each tuple.
- Go to the PM level of the MAP and look for RDTs that are in-service/trouble (ISTb) with the reason "RDT alarms present".
- Check for DMS logs RDT301 - RDT305 for alarm reports from the RDT.

Refer to features AF2444 and AF3798 for more details on these tracking methods.

Response 10

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C					*C*
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm	
0 Quit				3	0	1	0	1	
2		DISP SCALARM							
3 Equip									
4		SD POINTS IN ALARM STATE:							
5		CRITSYS		oau_critical					
6		CRITAUD		oau_critical					
7 List_		RDTCRT		oau_critical					
8 TstDSAlm		RDTMJ		oau_major					
9 SetSD_		RDTWRN		oau_no_alarm					
10 SetSC_									
11 Disp_									
12									
13 _Crit									
14 _FSP									
15 _Maj									
16 _Min									
17 _NoAlm									
18									
OPERATOR									
Time 14:35 >									

Explanation:

The "RDTCRT", "RDTMJ", and "RDTWRN" scan points indicate that critical, major, and warning software alarms exist at an RDT.

System action:

None.

User action:

If RDT alarms exist, use the alarm tracking procedures described later in this document. The alarm should be traced back to the RDT using one of three methods:

- Use the DISP SDALARM command to determine which of the coded RDT SD points (RDTSD1 - RDTSD8) are active. In table RDTINV, determine

which RDT is datafilled to activate those SD points by checking the SDPOINTS field of each tuple.

- Go to the PM level of the MAP and look for RDTs that are in-service/trouble (ISTb) with the reason "RDT alarms present".
- Check for DMS logs RDT301 - RDT305 for alarm reports from the RDT.

Refer to features AF2444 and AF3798 for more details on these tracking methods.

Notes

None.

Examples

See responses, above.

Command name:LIST

Command type

MENU

Command target

BOTH

Command availability

RES

Command description

This command displays all detected alarm conditions of the specified type. This command is modified to support one new software alarm, RDTWRN.

Warning

None.

Command syntax

List - List sources of a given alarm
Parms: <Alarm> {NOALM,
 MIN,
 MAJ,
 FSP,

CRIT}

Parameter definitions

Table 1-160 LISP Parameter Definitions

PARAMETER	VALUE	DEFINITION
ALARM	{NOALM, MIN, MAJ, FSP, CRIT}	To list alarms of the specified severity. "RDTWRN" is added to the list of possible responses.

Responses

The following example shows the new possible response from the LIST command.

Response 1

CC	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	
EXT	Ext Alarms			Crit	FSP	Major	Minor	NoAlm	
0	Quit			3	0	1	0	1	
2	LIST NOALM								
3	Equip			RDTWRN					
4									
5									
6									
7	List_								
8	TstDSAlm								
9	SetSD_								
10	SetSC_								
11	Disp_								
12									
13	_Crit								
14	_FSP								
15	_Maj								
16	_Min								
17	_NoAlm								
18									
OPERATOR									
Time 14:35 >									

Explanation:

This indicates that RDTWRN is an active alarm with a "no-alarm" severity.

System action:

None.

User action:

If an RDT software alarm function is displayed, it indicates the presence of an alarm at an RDT. The alarm should be traced back to the RDT using one of three methods:

- Use the DISP SDALARM command to determine which of the coded RDT SD points (RDTSD1 - RDTSD8) are active. In table RDTINV, determine which RDT is datafilled to activate those SD points by checking the SDPOINTS field of each tuple.
- Go to the PM level of the MAP and look for RDTs that are in-service/trouble (ISTb) with the reason "RDT alarms present".
- Check for DMS logs RDT301 - RDT305 for alarm reports from the RDT.

Refer to features AF2444 and AF3798 for more details on these tracking methods.

Notes

None.

Examples

See responses, above.

Command name:SETSD**Command type**

MENU

Command target

BOTH

Command availability

RES

Command description

This command puts an SD point in the specified state. This command is modified to support the new SD point functions "RDTACO" and "RDTWARN".

Warning

None.

Command syntax

SETSD - Operate or release an SD point
- Option to clear the operate count of the SD
Parms: <SD> StRING,
 <STATE> {REL,
 OP}
 [<CLEAR> {CLEAR}]

Parameter definitions

Table 1-170 SETSD Parameter Definitions

PARAMETER	VALUE	DEFINITION
SD	Any valid SD function name. Predefined names "RDTACO" and "RDTWARN" are added.	To operate or release the specified SD function.
STATE	{REL, OP}	REL to release the point; OP to operate it.
CLEAR	CLEAR	An optional paramter to indicate if the operate count is to be cleared.

Responses

The MAP responses from this command are unchanged.

Response 1

CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
.	.	..	...	1 IDT	.	.	.	3Crit	.
				C				*C*	
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm	
				3	0	1	0	1	
0	Quit								
2		SETSD RDTSD1 OP							
3	Equip	OK							
4									
5									
6									
7	List_								
8	TstDSAlm								
9	SetSD_								
10	SetSC_								
11	Disp_								
12									
13	_Crit								
14	_FSP								
15	_Maj								
16	_Min								
17	_NoAlm								
18									
OPERATOR									
Time 14:35 >									

Explanation:

If the command returns "Ok", it indicates that the state of the SD point was changed successfully.

System action:

None

User action:

None.

Notes

RDT SD points are normally activated by system software, not by using this command. If the state of an RDT SD point is manually changed with this command, a system audit will eventually reset it to its proper state.

Examples

```
SETSD RDTCRIT OP
SETSD RDTMAJOR REL
SETSD RDTACO REL CLEAR
```

Command name:SETSC

Command type

MENU

Command target

BOTH

Command availability

RES

Command description

This command puts a scan point or software alarm in the specified state.

Warning

None

Command syntax

```
SETSC - operate or release an SC point
Parms: <SC> STRING,
      <STATE> {REL,
              OP}
```

Parameter definitions

Table 1-180 SETSC Parameter Definitions

PARAMETER	VALUE	DEFINITION
SC	Any valid scan function or software alarm name. Predefined name "RDTWRN" is added.	To operate or release the specified scan function or software alarm. The system action for the "RDTALRMCO" scan function is changed
STATE	{REL, OP}	REL to release the point; OP to operate it.

Responses

The MAP responses from this command are unchanged.

Response 1

CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext APPL
.	.	..	...	1 IDT	.	.	.	3Crit .
				C				*C*
EXT		Ext Alarms		Crit	FSP	Major	Minor	NoAlm
0 Quit				2	0	0	0	1
2		SETSC RDTALRMCO OP						
3 Equip		OK						
4								
5								
6								
7 List_								
8 TstDSAlm								
9 SetSD_								
10 SetSC_								
11 Disp_								
12								
13 _Crit								
14 _FSP								
15 _Maj								
16 _Min								
17 _NoAlm								
18								
OPERATOR								
Time 14:35 >								

Explanation:

If the command returns "Ok", it indicates that the state of the scan point or software alarm was changed successfully.

System action:

If the RDTALRMCO scan function is operated while alarms are being displayed via RDT SD points and software alarms, the system will cutoff (disable) all alarms from the displayed RDT. This functionality is changed in three ways:

- The cutoff now also operates on warning-level alarms (software alarm RDTWRN and SD point RDTWARN).

- The cutoff will no longer mask new alarms that are generated after the cutoff is operated.¹
- Operating RDTALRMCO while *no* alarms are displayed will cause all cutoffs for *all* RDTs to be reset (i.e. all RDT alarms will be re-enabled.)

User action:

None.

Notes

RDT software alarms (RDTCRT, RDTMJ, RDTMN, and the new alarm RDTWRN) are normally activated by system software, not by using this command. If the state of an RDT software alarm is manually changed with this command, a system audit will eventually reset it to its proper state.

However, this command can be considered appropriate for operating the RDTALRMCO scan function.

Examples

```
SETSC RDTCRT OP  
SETSC RDTALRMCO OP  
SETSC RDTALRMCO REL
```

Command name:QUERYPM**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

¹Prior to this feature, alarms of a given severity from a given RDT would remain cutoff until all alarms of that severity had first been cleared at that RDT.

Command description

This command provides information about the peripheral module currently posted at the DMS MAP. When entered with no parameters, the following information is provided:

- PM type
- PM number
- internal number
- node number
- availability of facility protection switching
- C-side XPM (SMA) name
- name of the associated RDT

This functionality is not changed by this feature.

When QueryPM is entered with the FLT parameter, it displays the in-service/trouble (ISTb) or system-busy (SysB) reasons for the IDT. A new ISTb reason is added for this feature, "RDT alarm reporting not enabled." If this ISTb reason is active, it indicates that the DMS has not yet registered with the RDT to receive alarms; therefore, alarm displays at the DMS for that RDT may not be accurate.

Warning

None

Command syntax

QueryPM: Query information about the IDT
Parms: [<OPTION> {FLT}]

Parameter definitions

Table 1-190 QUERYPM Parameter Definitions

PARAMETER	VALUE	DEFINITION
OPTION	FLT	Use the FLT parameter to determine the ISTb or SysB reasons for the IDT. This parameter is optional.

Responses

The QueryPM command with no parameters provides information about the IDT currently posted. This functionality is not changed by this feature.

The QueryPM command with the FLT parameter provides the in-service/trouble (ISTb) or system-busy (SysB) reasons for the IDT. A new possible ISTb reason is added: "RDT alarm reporting not enabled" will be displayed if the maintenance connection is established, but the DMS has not registered to receive alarms.

Response 1

CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL			
.	.	.	.	1 IDT	.	.	.	2 Crit	.			
				C								
								C				
IDT			SysB	ManB	OffL	CBsy	ISTb	InSv				
0	Quit	PM	0	0	3	0	2	130				
2	Post	IDT	0	0	0	0	2	15				
3	Listset											
4												
5	Trnsl_	IDT 3		ISTb		Links_OOS:0						
6												
7	Bsy	QueryPM flt										
8	RTS	ISTb Reasons:										
9	OffL	RDT alarm reporting not enabled										
10		RDT alarms may be present										
11	Disp_	Use RDTalarm to view last retrieved										
12	Next											
13												
14	QueryPM											
15	RDTalarm											
16	PPS_											
17	Cont_											
18	LookBk											
OPERATOR												
Time 14:35 >												

Explanation:

The presence of the ISTb condition "RDT alarm reporting not enabled" indicates that the DMS has not yet registered to receive alarm reports and

alarm count notifications from the RDT. Therefore, RDT alarm indications may not be up-to-date, and no DMS "RDT" logs will be generated for alarms raised at the RDT, until this ISTb condition is cleared.

This ISTb reason will be suppressed if the maintenance connection is not established. (If the maintenance connection is not established, alarm reporting can never be enabled. However, displaying both "Maintenance connection not established" and "RDT alarm reporting not enabled" might be confusing, since it might not be clear which is the root problem. Therefore, only the "Maintenance connection not established" ISTb reason is displayed.)

If "RDT alarm reporting not enabled" is displayed, the "RDT alarms present" ISTb condition will read "RDT alarms may be present", since the true alarm conditions at the RDT cannot be determined from the DMS.

System action:

The system will automatically attempt to clear this ISTb condition. Typically, this condition only occurs immediately after the maintenance connection to the RDT is established or re-established. The condition usually lasts for only a few seconds.

User action:

If this ISTb reason is not cleared for twenty minutes (approximately) after the maintenance connection has been established, it may help to take down and re-establish the maintenance connection. To do so, first make both EOCs manually busy by typing:

```
BSY EOC1  
BSY EOC2
```

Then, return the EOCs to service by typing:

```
RTS EOC1  
RTS EOC2
```

If the problem persists, there may be a problem at the RDT. Check that the RDT is functioning properly (i.e. ensure that no software errors or hardware faults have occurred.)

Notes

None.

Examples

See "Responses," above.

Alarms

Alarm name:RDTWRN

Conditions required to raise the alarm

This new software alarm will be operated when a warning-level alarm is detected at an RDT, or when a previously cutoff warning-level alarm from an RDT is re-enabled. The datafill for that RDT (in table RDTINV) must have a non-nil entry in the SDPOINTS field.

Duration of the alarm

The alarm will persist until one of the following events occur:

- The DMS determines that the alarm was cleared at the RDT. It will then release the alarm unless another RDT also has a warning-level alarm, and the alarm is enabled (not cutoff).
- The RDTALRMCO scan function is used to cutoff the alarm. The alarm will be released unless another RDT also has a warning-level alarm, and the alarm is enabled (not cutoff).
- The IDT corresponding to the RDT with the alarm is taken off-line. The alarm will be released unless another RDT also has a warning-level alarm that is enabled (not cutoff).
- All SD points in the SDPOINTS field of the RDTINV tuple for the RDT are deleted. The alarm will be released unless another RDT also has a warning-level alarm that is enabled (not cutoff).
- The craftsperson manually retires the software alarm using the SETSC command. A system audit will reactivate the alarm within one minute if the activation criteria still apply.

Alarm name:RDTWARN

Conditions required to raise the alarm

By default, this new SD point will be operated (if it is datafilled in table ALMSD) when the RDTWRN software alarm is activated. Therefore, it will be operated under the same conditions as RDTWRN.

Duration of the alarm

This SD point will normally remain operated (active) for the same duration as the RDTWRN software alarm, or until the craftsperson manually retires the

SD point using the SETSD command. A system audit will reactivate the SD point within one minute if the software alarm is still active.

Alarm name:RDTACO**Conditions required to raise the alarm**

This new signal distribution point will be operated if there are active alarms at the RDT which have been cutoff using the RDTALRMCO scan function.

Duration of the alarm

This SD point will remain operated (active) until one of the following conditions is met:

- The craftsperson manually retires the SD point using the SETSD command. A system audit will reactivate the SD point within one minute if the cutoff RDT alarms still exist.
- The RDTALRMCO scan function is operated while no RDT alarms are displayed via SD points (i.e. all RDT alarms have been cutoff). This will clear all cutoffs for all RDTs, thereby re-enabling all RDT alarms.
- A cutoff RDT alarm is cleared at the RDT, and no RDTs have any more cutoff alarms.
- A new alarm clears (overrides) an alarm cutoff, and no RDTs have any more cutoff alarms.
- Cutoffs are cleared for an RDT because a maintenance connection to an RDT was taken down and re-established, and no other RDTs have cutoff alarms.
- Cutoffs are cleared for an RDT because the corresponding IDT was taken off-line, and no other RDTs have cutoff alarms.
- Cutoffs are cleared for an RDT because all SD points in the SDPOINTS field of the RDTINV tuple were deleted, and no other RDTs have cutoff alarms.

AF5672mm.aa04

Directories

Table of new/modified directories

Table 1-200 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LCMDIR				

Accessing directory:

To access

MAPCI;MTC;PM;POST LCM <NAME> <#> <#>

To return to CI

Quit MAPCI

Commands

Table of New/modified commands

Table 1-210 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
LOADPM	CHANGED		LCMDIR

Command name:

LOADPM

Command type

MENU

Command target

SuperNode

Command availability

RES

Command description

Loadpm command will contain a new optional field "NOCHECK". This field, when used will not conduct a preliminary nondestructive ROM test to determine if a reload is necessary. The following command display will show where NOCHECK is located.

```
LOADPM <device> SOURCE NOCHECK NOWAIT ALL
```

Warning

When a loadpm command, without the NOCHECK option, is issued, and if the loadname is same with a valid load, then the outage data collected will be lost.

Command syntax

```
LOADPM <device> SOURCE NOCHECK NOWAIT ALL
```

Parameter definitions

Table 1-220 LOADPM Parameter Definitions

PARAMETER	VALUE	DEFINITION
NOCHECK	NOCHECK	Don't do XLCM load validation check

Responses

>LCM <pmid> <unit> : Load validation passed, loadpm is not necessary, any outage data will be lost if reloaded.

Please confirm (©Yes", ©Y", ©No" or ©N")

Explanation:

When a loadpm command, without the NOCHECK option, is issued, the system will check if the loadname entered is same as the existing load in the XLCM unit, and if it is, the system will conduct a preliminary test to find out if a reload is necessary. If the reload is not necessary, then the above message will be displayed on the MAP, where the user decides if they would like to proceed with the reload anyway or not.

System action:

N/A

User action:

User will respond either "Yes" to reload the XLCM unit even if the load is same and valid, else the user will say "No" to stop the reload.

Notes

None.

Examples

Provided above.

Alarms

Alarm name:

N/A

Conditions required to raise the alarm

Duration of the alarm

AF5674mm.ab02

Directories

LCMDIR

Table of new/modified directories

Table 1-230 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LCMDIR			BOTH	RES

No changes to the directory or the commands within the directory have been made. Only the MAP display is affected by this feature. The MAP display will include the new LCM inservice troubles introduced by this feature.

Accessing directory:

LCMDIR

To access

MAPCI;MTC;PM;POST LCM ALL

To return to CI

QUIT MAPCI

Commands

QUERYPM

Table of New/modified commands

Table 1-240 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUERYPM			LCMDIR

The "QueryPM" command has not been changed. The affect of this feature in relation to the command is that the new LCM inservice troubles will be

displayed when the "Flt" option is used if an ANI/COIN or Power Converter fault exist.

Command name:

QUERYPM

Command type

MENU

Command target

BOTH

Command availability

RES

Command description

The QUERYPM command option "FLT" will display the new inservice troubles introduced by this feature.

Warning

N/A

Command syntax

QUERYPM <FLT>

Parameter definitions

Table 1-250 QUERYPM Parameter Definitions

PARAMETER	VALUE	DEFINITION
FLT		DISPLAY FAULTS

Examples

The above is an example of the "QueryPM flt" command result when both units exhibit ringing generator ANI/COIN failures.

The above is an example of the "QueryPM flt" command result when an LCM unit has reported a Power Converter Failure..

Alarms

Alarm name:

CRITICAL

Conditions required to raise the alarm

A CRITICAL alarm will be raised when both Ringing Generator cards have failed ANI/COIN diagnostics.

Duration of the alarm

The CRITICAL alarm will be cleared when either of the Ringing Generator cards have successfully passed diagnostics.

AN0342mm.aa08**Directories****Table of new/modified directories****Table 1-260 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

N/A

Accessing directory:

N/A

To access**To return to CI****Commands**

TRAVER

Table of New/modified commands**Table 1-270 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	Changed		

Command name:**Command type**

CI

Command target**Command availability**

DMS 100/200/250/300

Command description

CI command TRAVER is modified to except "CDN", "CIC", and CIC digits. These parameters are necessary to set TV_CCB.CHB.LEAS_CALL to TRUE when the CIC entered equals office parameter LEAS_SS7_CIC. From this point on, the call will utilized LEAS on SS7 translations.

Warning

Command syntax

Parameter definitions

Table 1-280 TRAVER Parameter Definitions

PARAMETER	VALUE	DEFINITION
MFST_CDN	ST digit or "CDN"	
BILLST_CIC	ST digit or "CIC"	
CIC_DIGITS	Four digit number	Range 0000 to 9999

MFST_CDN

Valid Values: ST, ST2P, ST3P, CDN

BILLST_CIC

Valid Values: ST, ST2P, ST3P, CIC.

CIC_DIGITS

Valid Values: 0000 to 9999

Response

Explanation:

System action:

User action:

Notes

Examples

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN0354mm.aa08**Directories**

Not Applicable

Table of new/modified directories**Table 1-290 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Not Applicable

Table of New/modified commands**Table 1-300 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:

Command type

Command target

Command availability

Command description

Warning

Command syntax**Parameter definitions****Responses****Response from RtusEmulMTU**

The following comments are generated for the LTP display based on the IRTU test result:

- No Reply from IRTU, Examine IRTU
- Test failed, Examine IRTU
- Command Checksum Failed
- Invalid command received by IRTU
- Invalid parameter received by IRTU
- IRTU fatal error, Examine IRTU
- IRTU current can not be applied
- High current on Tip detected by IRTU
- High current on Ring detected by IRTU
- High current on both Tip and Ring detected by IRTU
- Unknown IRTU error
- Unknown IRTU return code

Response from MONLTA/TALKLTA

The following comments are displayed when there is an error occurred during the monitor/talk connection set up:

- Can not seize the call back path
- Failed to connect Headset to the call back path
- Failed to connect the call back path to IRTU
- Failed to set requested tone by IRTU

MAP LTP Display

All the display using character string "MTU" or "LTU" are replaced with character string "IRTU" when an IRTU is used.

ALT Log

All the log described with character string "MTU" or "LTU" are replaced with "IRTU" when an IRTU is used.

Alarms

Not Applicable

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN0548mm.aa04**Directories**

This feature is responsible to generate man machine error messages for the following GPP lines maintenance commands from:

- ALT MAP level (All maintenance commands)
- LTP MAP level (DIAG and LCO maintenance commands)
- LTPMAN MAP level (All maintenance commands)
- LTPLTA MAP level (All maintenance commands)
- LTPDATA MAP level (All maintenance commands)

Table of new/modified directories

N/A.

Accessing directory: ALT**To access directory**

MAPCI;MTC;LNS;ALT

To return to CI

QUIT ALL

Commands

Commands name: All ALT level maintenance commands

Commands type

MENU commands - activated from ALT level.

Commands target

SuperNode

Commands availability

These commands are restricted for GPP lines.

Commands description

N/A

Warning

N/A

Commands syntax

N/A

Parameter definitions

N/A

Response

The following message is generated on the MAP: ©Command is not valid on PLD/GPP line"

Notes

N/A

Examples

N/A

Accessing directory: LTP**To access directory**

MAPCI;MTC;LNS;LTP

To return to CI

QUIT ALL

Commands**Commands name: DIAG & LCO****Commands type**

MENU commands - activated from LTP level.

Commands target

SuperNode

Commands availability

These commands are restricted for GPP lines.

Commands description

N/A

Warning

N/A

Commands syntax

N/A

Parameter definitions

N/A

Response

The following message is generated on the MAP: ©Command is not valid on PLD/GPP line"

Notes

N/A

Examples

N/A

Accessing directory: LTPLTA**To access directory**

MAPCI;MTC;LNS;LTP;LEVEL LTPLTA

To return to CI

QUIT ALL

Commands

Commands name: All LTPLTA maintenance commands

Commands type

MENU commands - activated from LTPLTA level.

Command target

SuperNode

Commands availability

These commands are restricted for GPP lines.

Commands description

N/A

Warning

N/A

Commands syntax

N/A

Parameter definitions

N/A

Response

The following message is generated on the MAP: ©Command is not valid on PLD/GPP line”

Notes

N/A

Examples

N/A

Accessing directory: LTPMAN**To access directory**

MAPCI;MTC;LNS;LTP;LEVEL LTPMAN

To return to CI

QUIT ALL

Commands

Commands name: All LTPMAN maintenance commands

Commands type

MENU commands - activated from LTPMAN level.

Commands target

SuperNode

Commands availability

These commands are restricted for GPP lines.

Commands description

N/A

Warning

N/A

Commands syntax

N/A

Parameter definitions

N/A

Response

The following message is generated on the MAP: ©Command is not valid on PLD/GPP line"

Notes

N/A

Examples

N/A

Accessing directory: LTPDATA**To access directory**

MAPCI;MTC;LNS;LTP;LEVEL LTPDATA

To return to CI

QUIT ALL

Commands

Commands name: All LTPDATA maintenance commands

Commands type

MENU commands - activated from LTPDATA level.

Commands target

SuperNode

Commands availability

These commands are restricted for GPP lines.

Commands description

N/A

Warning

N/A

Commands syntax

N/A

Parameter definitions

N/A

Response

The following message is generated on the MAP: ©Command is not valid on PLD/GPP line”

Notes

N/A

Examples

N/A

AN0549mm.ab01

Directories

This feature supports the following MAP levels:

- PM
- PERFORM

Table of new/modified directories

Table 1-310 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PM	CHANGED	UNCHANGED		
PERFORM	CHANGED	UNCHANGED		

Accessing directory: PM

To access directory

MAPCI;MTC;PM;POST GPP

To return to CI

QUIT ALL

Commands

This feature implements only basic 100Common hooks.

When a command ©POST GPP” has been issued the following commands are available: QUIT, POST, LISTSET, TRNSL, TST, BSY, RTS, OFFL, LOADPM, DISP, NEXT, SWACT, QUERYPM, PERFORM, PMRESET.

Support for GPP is provided for the PERFORM sub_command.

The command PERFORM is available from the MAPCI PM level for the posted peripheral in following states: InSv, ISTb.

The syntax of command PERFORM is unchanged.

Table of New/modified commands**Table 1-320 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
PERFORM	CHANGED	N/A	PM
USAGE	CHANGED	N/A	PERFORM
INTRLS	CHANGED	N/A	PERFORM

Command name: PERFORM**Command type**

MENU command

Command target

SuperNode

Command availability

The command PERFORM is changed in order to support a new PM type GPP.

Command description

The command PERFORM displays information about the processors of a posted PM. When the command is issued, the level is accessed and the performance status of the posted PM is added to the PM's status display.

At the PERFORM level the following commands are available: to access sublevel PMAct, to indicate which PMs are being monitored by the performance process (PFQuery), to indicate dialtone delay's information - sublevel Delays.

When the command PERFORM is issued with the LAB parameter, two sublevels are available as well: USAGE, INTRLS.

On each sublevel the following commands are available with no changes: STRT, STOP, STRTLOG, STOPLOG.

Warning

N/A

Command syntax

PERFORM

Parameter Definition

N/A

Response

Not changed

Note

N/A

Examples

Command name: USAGE

CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
CM Flt	SysB	AMAuB	.	.	.	.	2GC	1Crit	ACBLNK
M	M	*C*					*C*	*C*	
PERFORM			SysB	ManB	OffL	CBsy	ISTb	InSv	
0	Quit	PM	0	0	10	0	0	11	
2	PMAct	GPP	0	0	5	0	0	3	
3									
4	Delays								
5	Usage	GPP	1	InSv	Links_OOS: CSide 0 PSide 0				
6	Intrls								
7		Unit0:	Act	InSv					
8		Unit1:	InAct	InSv					
9	PFQuery	Load Name: GPP02BZ							
10		Status: Running Reason: CommandLogs: OnTime:00.12.15							
11									
12									
13									
14									
15									
16									
17									
18									

RD040
Time 16:20 >

Command type

MENU command

Command target

SuperNode

Command availability

The command is changed in order to support GPP PM type.

Command description

When the commands

- POST GPP
- PERFORM LAB

had been executed, the command USAGE is available.

Warning

N/A

Command syntax

USAGE

Parameter definitions

N/A

Response 1

CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
CM Flt	ManB	ICMAB	1Link	.	.	2 GC	1Crit	ACBLNK	
M	M	*C*		M		*C*	*C*		
USAGE		SysB	ManB	OffL	CBsy	ISTb	InSv		
0 Quit		PM	0	0	8	0	3	4	
2 Strt		GPP	0	0	2	0	0	2	
3 Strtlog									
4 Stoplog		GPP	2	InSv	Links_OOS: CSide 0			PSide 0	
5 Stop									
6		Unit0: Act		InSv					
6		Unit1: InAct		InSv					
8		Load Name: GPP02BZ							
9		Status:STOPPED REASON: NOT_STARTED LOGS:OFFTIME: 00:00:00							
10		ABDN EXIT		CONFUTR_DNY				LCM_BLK	
11									
12		REL_CAL		BD_DG					
13		NET_PAR		NET_INTG		CP_PM180REST_180		TX_FAIL	
14		NET_FND		NET_NFND16					
15									
16									
17									
18									
CMAPO									
Time 14:03 >									

Note

N/A

Example

MAPCI;MTC;PM;POST GPP 2;PERFORM LAB;USAGE

Command name: INTRLS**Command type**

MENU command

Command target

SuperNode

Command availability

The command is changed in order to support GPP PM type.

Command description

When the commands

- POST GPP
- PERFORM LAB

had been executed, the command INTRLS is available.

Warning

N/A

Command syntax

INTRLS

Parameter definitions

N/A

Response 2

CM	MS	IOD	Net	PM	CCS	LnS	Trks	Ext	APPL
CM Flt	ManB	ICMAB	1Link	.	.	2 GC	1Crit	ACBLNK	
M	M	*C*		M			*C*	*C*	
INTRLS			SysB	ManB	OffL	CBsy	ISTb	InSv	
0	Quit	PM	0	0	8	0	3	4	
2	Strt	GPP	0	0	2	0	0	2	
3	Strtlog								
4	Stoplog								
5	Stop	GPP	2	InSv	Links_OOS: CSide 0			PSide 0	
6									
7		Unit0:	Act	InSv					
8		Unit1:	InAct	InSv					
9		Load Name: GPP02BZ							
10		Status:STOPPED REASON: NOT_STARTED LOGS:OFFTIME: 00:00:00							
11									
12			FNB	XDB	ATHB	CHB	IPC		
13		HIGH							
14		INUSE							
15		AVAL							
16									
17									
18									
CMAPO									
Time 14:03 >									

Note

N/A

Example

MAPCI;MTC;PM;POST GPP 2;PERFORM LAB;INTLRS

AN0753mm.aa06**Directories**

PROGDIR

Table of new/modified directories**Table 1-330 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PROGDIR	CHANGED		BOTH	RES

Accessing the directory

To access:
SSR

To return to CI:
QUIT

Commands**Table of new/modified commands****Table 1-340 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
SSR	NEW		PROGDIR

Command name: SSR**Command type**

NON-MENU

Command target

SuperNode

Command availability

RES

Command description

The SSR command is a CI command which provides access to DISPLAY, RESETAVG, HELP, and QUIT subcommands.

The DISPLAY subcommand outputs the specified report in either the short or verbose format. If a report is not specified, the feature will output the SSR600 report by default. The data displayed is from the current reporting interval and thus provides a view of current values. The number of minutes for which the log is reporting is displayed on the report. The length of the previous reporting interval and the average reporting interval data is also displayed. This information is displayed at the top right corner of the report as CUR xx / PREV 15/AVG 15, where CUR xx is equivalent to the number of minutes on which the SSR600 is reporting.

The RESETAVG subcommand resets the average data values to zero. This subcommand is provided to start the averaging process again. Restarting the averaging process is useful when the average data has become skewed as a result of an abnormal event or a planned change to office traffic patterns.

The HELP subcommand provides help information for the subcommands of the SSR command.

The QUIT subcommand returns the user to the previous CI environment.

Warning

Reference Response 3 for the warning issued when the user invokes the RESETAVG subcommand. No other warnings are applicable with use of this feature.

Command syntax

After the user enters the SSR CI level, the following commands are available:

```
DISPLAY <REPORT>[ { SSR600,
                        SSR601,
                        .
                        .
                        .
                        SSR615,
                        ALL}
                        [VERBOSE]
HELP [DISPLAY|CLEAR|QUIT]
RESETAVG <REPORT> { SSR600,
                    SSR601,
                    .
                    .
                    .
                    SSR615}

QUIT
```

Parameter definitions

Table 1-350 SSR Parameter Definitions

PARAMETER	VALUE	DEFINITION
report	variable	This parameter specifies the report to be output. The valid reports range from SSR600 to SSR615 or ALL. The default report is SSR600.
VERBOSE	VERBOSE	Optional parameter to include text descriptions in output.

Responses

Response 1

```

<CLLI...>  SSR600 MAR31 14:17:00 6408 INFO Switch Status Report
Current Data reported from MAR31 14:02 to MAR31 14:17
      00:15  00:15  00:15  NAME      00:15  00:15  00:15
TOTAL_TERM:  14317  13990  14932  BLKD_CPRES:  0    0    0
TOTAL_ORIG:  14331  13996  14943  BLKD_MISC:  0    0    0
TRK_INC:      4898  4877  5112  DROPPED:    0    0    0
LINE_ORIG:    9433  9119  9830  CP_TRAPS:   0    0    0
TANDEM:       595   554   615   CP_SUICIDE:  0    0    0
INTER_OFC:    5851  5664  6096  1TRIALFAIL: 1    4    0
INTRA_OFC:    1663  1661  1794  DLY_PER10K: 0    0    0
CPU_OVERLD:   0     0     0     PSIG_PDIL:  162  179  166
PM_OVERLD:    0     0     0     CP_OCC_PCT:  19   18   18
SYSB_PM:      0     0     0     NONCP_TRAP: 0    0    0
MANB_PM:      0     0     0     SWER_LOGS:  0    0    0
C7MSU_TX:     32536  30256  31530  C7LINK1_ERR: 0    0    0
C7MSU_RX:     32537  30256  31530  C7RS_ERR:   0    0    0
AMA_RECS:     7086  6850  7539  ORIG_CHG:   2   -1    1
-----
TRK_LOW_1:  GRCCTOMFIEO  59 TRK_LOW_2:  GRCCTOMFIE1  37
-----
CM: .                MS: .                IOD: .                Net: 1Link
PM: .                CCS: .                Lns: .                Trks: 2 CC/C
Ext: 2Crit/C        APPL: .

```

Explanation:

The specified report is output in short format when the user enters the DISPLAY subcommand without the [VERBOSE] option. To display other datafilled reports, the user enters the display command with the valid report name.

System action:

The tool displays the report in the short format.

User action:

To output the report in the long format, the user re-enters the DISPLAY subcommand with the VERBOSE option.

Response 2

Switch Status Report - Current Data from MAR31 14:17 to MAR31 14:25

Name	Description	00:08 CURR	00:15 PREV	00:15 AVG

TOTAL_TERM:	Combined line and trunk terminations	7120	14317	14932
BLKD_CPRES:	Blocked calls due to no CP resources	0	0	0
TOTAL_ORIG:	Combined line and trunk originations	7208	14331	14943
BLKD_MISC:	Miscellaneous blocked calls	0	0	0
TRK_INC:	Incoming calls (trunk originations)	2091	4898	5112
DROPPED:	Established calls dropped by system	0	0	0
LINE_ORIG:	Line originations	4312	9433	9830
CP_TRAPS:	Call processing software traps	8	0	0
TANDEM:	Trunk to trunk calls	225	595	615
CP_SUICIDE:	Call processing detected software errors	5	0	0
INTER_OFC:	Line to trunk calls	2403	5851	6096
1TRIALFAIL:	First trial failures (no network path)	5	4	0
INTRA_OFC:	Line to line calls	935	1663	1794
DLY_PER10K:	Dialtone delays per 10000	0	0	0
CPU_OVERLD:	Minutes of CM (CC) overload	0	0	0
PSIG_PDIL:	Permament signal/partial dials	102	179	166
PM_OVERLD:	Calls denied due to peripheral overload	0	0	0
CP_OCC_PCT:	CPU Status Call Processing occupancy	24	18	18
SYSB_PM:	PM transitions to SYSB w/o CBSY 1st	0	0	0
NONCP_TRAP:	CPU traps excluding CP traps	4	0	0
MANB_PM:	PM transitions to MANB from IS or ISTB	0	0	0
SWER_LOGS:	SWER log count	2	0	0
C7MSU_TX:	CCS7 MSUs transmitted and terminated	14300	32536	31530
C7LNK1_ERR:	CCS7 link sync and link error counts	0	0	0
C7MSU_RX:	CCS7 MSUs received and originations	14301	32537	31530
C7RS_ERR:	CCS7 routeset congestions and failures	0	0	0
AMA_RECS:	Count of AMA records generated	3306	7086	7539
ORIG_CHG:	Percent change between reporting periods	2	-1	1

TRK_LOW_1:	Trunk with most failures	GRCCTOMFIEO 51
TRK_LOW_2:	Trunk with 2nd most failures	GRCCTOMFIE1 39

```

CM: .      MS: .      IOD: .      Net: 1Link
PM: .      CCS: .     Lns: .      Trks: 2 CC/C
Ext: 2Crit/C  APPL: ACBLNK

```

The SSR600 is output in the long format when the user enters the DISPLAY subcommand with the VERBOSE option. If a report name is not specified when using the DISPLAY subcommand, the feature will output the SSR600 by default.

The length of the current reporting interval is indicated on the top right corner of the report. The 00: 08 over CURR indicates that the current reporting

interval was eight minutes. Prev 15 reflects that the previous reporting period was 15 minutes. Avg 15 indicates that the average value is for a 15 minute interval during the present hour on that day of the week. For example, Avg 15 would reflect the average values for a 15 minute interval during Monday at 14:00.

The least successful trunk groups are indicated as a count of trunk failures per trunk group. For example, the TRK_LOW_1 calculation reflects that 51 calls failed to complete for this trunk group.

System action:

The tool displays the SSR log in the VERBOSE format.

User action:

To output the log in the short format, the user re-enters the DISPLAY subcommand without the VERBOSE option.

Response 3

WARNING: This will reset all average values for the SSR600 report to ZERO. Do you wish to continue? (Y/N)

Explanation:

This warning is displayed when the user enters the RESETAVG subcommand. The RESETAVG subcommand resets all average values used in the SSR600 to zero. The warning provides a safeguard against accidental use of the RESETAVG subcommand.

System Action:

If the user enters Y, the feature will reset all average values used in the SSR600 to zero.

If the user enters N, the feature will not implement the RESETAVG subcommand. The user will be returned to the SSR prompt and the average values used in the SSR600 will be unchanged.

Response

Unknown report name

Explanation:

This message is displayed if the user enters the DISPLAY subcommand followed by a report name that is not in the range of SSR600-SSR615 and is not defined in table SSRDEF.

System action:

The tool does not run and the user is returned to the SSR prompt.

User action:

The user either re-enters the subcommand followed with a valid report name or the user enters the DISPLAY subcommand without specifying a report name. Unless a report name is specified, the SSR feature will print the SSR600 by default. To be considered valid, specified report names must be in the range of SSR600-SSR615 and defined in table SSRDEF.

Potential future enhancements

Potential future sub-commands to the SSR command are listed below:

Table 1-360 Potential Future Subcommands

ADD <REPORT LABEL>	This subcommand adds a new report or a new label.
DELETE <REPORT LABEL>	This subcommand deletes an existing report or label.
CHANGE <REPORT LABEL>	This subcommand changes the field values in an existing report or label.
EVAL <LABEL>	This subcommand evaluates and displays the value of the formula associated with an existing label using current OM values.
DUPLICATE <LABEL>	This subcommand copies field values of an existing label to a new label.
ORDER <REPORT>	This subcommand specifies the order in which the labels will be reported within a log report and the output of displayed subcommands.

AN0754mm.aa07**Directories****Table of new/modified directories****Table 1-370 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands**Table of New/modified commands****Table 1-380 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
NAG	NEW		PROGDIR

Command name: NAG

Command type

NON-MENU

Command target

SuperNode

Command availability

RES

Command description

The NAG command is a CI command which allows Node Assessment information to be displayed to the screen. All of the nodes that have out of service conditions (i.e. in service trouble, manbusy, system busy or a rex

condition) will be displayed. There are more options available with the parameters OFF, ON and ALL.

The command NAG OFF will not display the Node Assessment information, but will turn the NAG400 log off. The database that keeps track of the number of times a particular node has been reported in the log will be deleted.

The command NAG ON will not display the Node Assessment information, but will turn the NAG400 log on. If the NAG400 log was previously on, then a message will be displayed informing that the NAG400 log is already on. If the NAG400 log was off, a new database that keeps track of the number of times a particular node has been reported will be re-created and at 4 minutes after the hour the NAG400 log will be reported.

The command NAG ALL will display the nag information plus the nodes that are off-line.

Warning

When turning the NAG400 log off, the user will be prompted to ensure that is what the user wants. When turning NAG400 off, the internal database is cleared, so when the log is turned back on, the count that indicates how many past reports the nodes has been in an out of state condition will be re-initialized to one.

Command syntax

NAG {OFF, ON, ALL}

Parameter definitions

Table 1-390 NAG Parameter Definitions

PARAMETER	VALUE	DEFINITION
OFF	OFF	Optional parameter to turn the NAG400 log off.
ON	ON	Optional parameter to turn the NAG400 log on.
ALL	ALL	Optional parameter to have the displayed nodes included.

Responses

Response 1

Front End Load: FSL37AF

Level	Node	Status	REX	INFO	Unit 0	Unit 1
	CPU	0		ACT		
CM				NORMAL		
MS				NORMAL		
IOD	MTD	4		SYSB	---	-- --
	MPC	4		SYSB	----	-- --
NET				NORMAL		
PM	LCM	ERCM00	0	SYSB	---	-- --
	NIU	0		SYSB	FAILED	MANBMANB
	RMM	1		CBSY	----	-- --
	ESA	0		CBSY	----	ISTB
MANB						
	LGC	0		ISTB	ATP	. ISTB
	LTC	0		ISTB	ATP	ISTB ISTB
	LTC	1		ISTB	ATP	ISTB ISTB
	DTC	0		ISTB	FAILED	. .
	DTC	1		ISTB	ATP	ISTB ISTB
	SMR	0		ISTB	ATP	ISTB ISTB
	SMS	0		ISTB	ATP	ISTB .
	SMU	0		ISTB	ATP	ISTB ISTB
	TMS	0		ISTB	ATP	. .
	SMA	0		ISTB	ATP	ISTB ISTB
	LTC	2		ISTB	ATP	. .
	DTC	2		ISTB	ATP	ISTB ISTB
	MSB7	0		ISTB	ATP	. ISTB
	RCC	0		ISTB	FAILED	. ISTB
	RCS	ERCS00	0	ISTB	----	-- --
	SMSR	0		ISTB	NO_REX_RUN	ISTB ISTB
	LIM	0		.	FAILED	. .

Offline Node Count: 1

Explanation:

This is the report that is displayed when the NAG command is issued. The report includes the software load and which CPU is active. The nodes are ordered first by level. CM is the first level, then MS, IOD, NET and PM. If the level does not have any nodes with reportable conditions then NORMAL is displayed. Within the level the nodes are sorted by their status. SYSB is first, then CBSY, ISTB, MANB and then REX problems. The nodes with the same status are not sorted in any priority, it is simply how the system picks it up when looping through the node numbers. At the bottom of the report the offline node count is displayed.

System action:

Cycle through the levels and find out of service nodes and print in priority of their status or rex issue.

User action:

If the user would like to see the offline nodes, enter NAG ALL.

Response 2

Nag will include offline nodes.

Front End Load: FSL37AF

Level	Node	Status	REX INFO		Unit 0	Unit 1

CPU	0	ACT				
CM		NORMAL				
MS		NORMAL				
IOD MTD	4	SYSB	----	--	--	
MPC	4	SYSB	----	--	--	
NET		NORMAL				
PM LCM	ERCM 00 0	SYSB	----	SYSB		SYSB
NIU	0	SYSB	FAILED	MANB		MANB
RMM	1	CBSY	----	ISTB		MANB
ESA	0	CBSY	----	ISTB		MANB
LGC	0	ISTB	ATP	.		ISTB
LTC	0	ISTB	ATP	ISTB		ISTB
DTC	0	ISTB	FAILED	.		.
DTC	1	ISTB	ATP	ISTB		ISTB
SMR	0	ISTB	ATP	ISTB		ISTB
LDT PSAP	14 0	ISTB	----	ISTB		.
SMU	0	ISTB	ATP	ISTB		ISTB
TMS	0	ISTB	ATP	.		.
SMA	0	ISTB	ATP	ISTB		ISTB
LTC	2	ISTB	ATP	.		.
DTC	2	ISTB	ATP	ISTB		ISTB
MSB7	0	ISTB	ATP	.		ISTB
RCC	0	ISTB	FAILED	.		ISTB
RCS	ERCS 00 0	ISTB	----	--		--
SMSR	0	ISTB	FAILED	ISTB		ISTB
LDT	1	OFFL	----	OFFL		OFFL

Explanation:

This is the report that is displayed when the NAG ALL command is issued. The only difference between the NAG and NAG ALL commands are that the NAG ALL command includes the offline nodes in the report. The size of the report is limited by the number of nodes in the office. This could be a very large report.

Note:

Notice that the LDT does not have the long descriptive name like the LDT that is ISTB. This is a limitation of NAG ALL. The RCU, RCS, and LDT with long external names will be represented by their internal number when the node is in the OFFL state only.

Response 3

Then hourly NAG400 log is already on.

Explanation:

When the user enters NAG ON at the command line and the NAG400 log is currently on no action is taken, but a message is displayed.

Response 4

Then hourly NAG400 log is already off.

Explanation:

When the user enter NAG OFF at the command line and the NAG400 log is currently off, no action is taken.

Response 5

The hourly NAG400 log has been turned ON. It will be generated at 4 minutes passed every **hour**.

Explanation:

This is the response when the nag on command is issued and NAG400 was previously off.

System action:

The system re-initializes the internal database and the count displayed on the first log will be one. The count represents the number of times that the node associated with it has had, consecutively, the conditions reportable for the NAG400 log.

Response 6

The NAG database will be deleted.

Do you still want to turn the log off?

Please confirm ("YES", "Y", "NO", or "N"):

>yes

The hourly nag log has been turned OFF.

Explanation:

This is the response with nag off is entered when the log is currently on. If no is entered at the prompt. There is no response and the log will not be turned off.

System action:

The internal database is deleted.

Notes**Examples**

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Directories

No new or modified directories.

Commands

Table of New/modified commands

Table 1-400 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRNSL	CHANGED	N/A	RCCDIR

Command name:

Trnsl

Command type

Menu type

Command target

Supernode, BRISC

Command availability

RES command

Command description

Command TRNSL at the PM POST level of the MAPCI displays status of all links of a XPM. For every link the following data is reported: link number, C-side port ID, capability, link status, link condition, msglink restriction.

If the field ADDLMSG in table RCCINV is "Y", the command "TRNSL MSG C/P", when applied on a posted RCC2 or its HOST XPM+, will show all four message links between RCC2 and HOST XPM+.

This information is reported depending on the capability and restriction parameters for every link. This feature provides message capability and restriction to every additional message link, thus the corresponding

information for additional message links is outputted without any need of changes in this command.

Warning

Not applicable

Command syntax

TRNSL MSG C

TRNSL MSG P

Parameter definitions

Table 1-410 TRNSL Parameter Definitions

PARAMETER	VALUE	DEFINITION
C	{0 TO 15}	<CSIDE LINK>
P	{0 TO 53}	<PSIDE LINK>
MSG	C,P	<MESSAGE LINK>

Responses

Link 0: LTC 1 0;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict

Link 2: LTC 1 2;Cap MS;Status:OK ;MsgCond:OPN,Restrict

Link 4: LTC 1 4;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict

Link 6: LTC 1 6;Cap MS;Status:OK ;MsgCond:OPN,Restrict

Explanation:

Link x - mention the C-side link of the RCC2.

LTC y z - link #x of the RCC2 connect to link #z in LTC #y.

Cap MS - the link is message capable.

Status:OK - the link is INSV.

MsgCond:OPN - the link is open to messages.

Unrestrict - link is connected to ACTIVE unit of the remote.

Restrict - link is connected to INACTIVE unit of the remote.

System action:

None

User action:

None

Notes

None

Examples

A. POST LTC 1

• TRNSL MSG P

- Link 0: RCC2 1 0;Cap MS;Status:OK ; MsgCond:OPN,Unrestrict
- Link 2: RCC2 1 2;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 8: RCC2 1 4;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 10: RCC2 1 6;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict

• POST RCC2 1

• TRNSL MSG C

- Link 0: LTC 1 0;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict
- Link 2: LTC 1 2;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 4: LTC 1 8;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 6: LTC 1 10;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict

B. POST LTC 5

• TRNSL MSG P

- Link 0: RCC 3 0;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict
- Link 2: RCC 3 2;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 7: RCC 3 1;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 9: RCC 3 3;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict

• POST RCC 3

• TRNSL MSG C

- Link 0: LTC 5 0;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict
- Link 2: LTC 5 2;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 1: LTC 5 7;Cap MS;Status:OK ;MsgCond:OPN,Restrict
- Link 3: LTC 5 9;Cap MS;Status:OK ;MsgCond:OPN,Unrestrict

Alarms

Alarm name: N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

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Directories

This feature does not create any new directories, nor does it modify any existing directories.

Commands

This feature makes an enhancement to the QCOUNTS CI. See feature AL2440 for details of this command.

Table of New/modified commands

Table 1-420 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QCOUNTS	changed		DMSCI

Command name:

QCOUNTS

Command type

Non-menu.

Command target

SuperNode.

Command availability

Resident (RES).

Command description

This query command sends a request to the XLIU that a given XSG is mapped to and displays protocol and protocol abnormality counts information to the user. The information displayed includes link level counts, packet level counts, link level protocol abnormality counts, packet level protocol abnormality counts, and HFP board counts.

The QCOUNTS command also provides an option so that the counts can be reset after being queried.

The new functionality provided by this feature is to display, along with the queried information, the time and date when the RESET option was last used on a given set of counts.

Warning

Use of the RESET option will clear the counts for the given LTID or XSG (after the queried information has been displayed at the MAP).

Command syntax

See the MM section of feature AL2440.

Parameter definitions

See the MM section of feature AL2440.

Responses

The data displayed for a given set of counts will now include a date/time stamp, in the following format: YYYY/MM/DD HH/MM/SS. If the date/time stamp data could not be retrieved (for example, if an XLIU was running an older software version than what was running in the CM), then "unknown" is displayed instead.

Also, the N/A fields that were displayed when layer 2 protocol and abnormality counts were queried have been removed.

Explanation

See the MM section of feature AL2440.

System action

None.

User action

None.

Notes

None.

Examples

The following example shows the new date/time stamp displayed with the queried data:

```
>qcounts xsg 1
HFP BOARD COUNTS
-----
S01 Lower Byte Parity Error:          0
S01 Upper Byte Parity Error:         0
S01 Rx FIFO Overflow:                0
S01 Rx Sync Loss:                   0
R75 Supervisor Parity Error:         0
R75 Mastermode Parity Error:         0
Maintenance Queue Full:             0
Unsolicited Queue Full:             0
Maintenance Retry Queue Full:        0
Maintenance Retry Buffer Pool Empty:  0
HFP IPF Interface Error:             0
Maintenance Command Never Terminated: 0
S01 Received Unknown Error Interrupt: 0
R75 Received Unknown Error Interrupt: 0
R75 Rx Babbler:                     0
Counts last reset: 1993/5/21 14:12:02
>
```

If the date/time stamp could not be retrieved:

```
>qcounts xsg 1
HFP BOARD COUNTS
-----
S01 Lower Byte Parity Error:          0
S01 Upper Byte Parity Error:         0
S01 Rx FIFO Overflow:                0
S01 Rx Sync Loss:                   0
R75 Supervisor Parity Error:         0
R75 Mastermode Parity Error:         0
Maintenance Queue Full:             0
Unsolicited Queue Full:             0
Maintenance Retry Queue Full:        0
Maintenance Retry Buffer Pool Empty:  0
HFP IPF Interface Error:             0
Maintenance Command Never Terminated: 0
S01 Received Unknown Error Interrupt: 0
R75 Received Unknown Error Interrupt: 0
R75 Rx Babbler:                     0
Counts last reset: unknown
>
```

The layer 2 protocol and abnormality counts now look like this:

```
>qcounts ltid pkt 10 link
      LAYER 2 PROTOCOL AND ABNORMALITY COUNTS
      -----
Frames Received:
  I:          0      RR:      0  RNR:      0  SABME:      0
  DM:         0      DISC:    0  UA:       0  FRMR:      0
Frames Transmitted:
  I:          0      RR:      0  RNR:      0  SABME:      0
  DM:         0      DISC:    0  UA:       0  FRMR:      0
Rejects Received:          0  Rejects Transmitted:      0

MANAGEMENT DATA LINK ERRORS:
-----
Unsolicited Supervisory Response:          0
Peer Re-establishment (SABME):             0
Unsolicited DM Response (F set):           0
Unsolicited DM Response (F clear):         0
Unsolicited UA Response (F set):           0
Unsolicited UA Response (F clear):         0
Unsuccessful Re-transmission (SABME):      0
Unsuccessful Re-transmission (DISC):       0
Unsuccessful Re-transmission (STATUS):     0
Receipt of FRMR Response:                  0
Receipt of Unimplemented Frame:            0
Receipt of Information Field not Permitted: 0
Receipt of Wrong Size Frame:              0
N201 Error:                               0
N(r) Error:                               0
Counts last reset: 1993/5/21 14:17:31
>
```

Alarms

None.

Other MMI Interactions

In addition to the QCOUNTS enhancement, this feature implements DMS PH Operational Measurements. This will allow new OM's to be reported through the OM system (such as by the OMSHOW command). See the OM section of this DDOC for MMI examples. Note that the active registers will only be updated less than one minute prior to the active-to-holding register transfer (at which time they are cleared to 0). Therefore, OMSHOW can not be effectively used to view the active registers for the HFPOM and XLIUL3 OM groups. Furthermore, a standard DDM107 log will be generated if DDM fails to collect the XLIU OM data within one minute. An example of this log follows:

```
*DDM107 MAY31 10:33:54 1167 FLT XLIU 123 ILM
DISTRIBUTED DATA OM RETRIEVAL FAILED
```

FAILED TO RETRIEVE OMs FOR TABLE phf_tree (Tableid=143)
Reason = No Reply from PM

No other system action takes place when this log is generated, and no user action is required. The log is meant to warn the user that the OM data displayed during this collection period will be incorrect, as it was not received by the CM. Furthermore, the next OM collection period may contain the data intended for the failed collection period, if the data has simply arrived late.

AR0506mm.aa06**Directories**

Not Applicable

Table of new/modified directories**Table 1-430 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Not Applicable

Accessing directory:

Not Applicable

To access

Not Applicable

To return to CI

Not Applicable

Commands

LOADTE

Table of New/modified commands**Table 1-440 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
LOADTE	NEW	N/A	ESTUDIR

Command name: LOADTE

Command type

This is a MENU command associated with the ESTU level.

Command target

SUPERNODE.

Command availability

This is a RES command.

Command description

Command LOADTE provides the functionality to download the ESTU Master Module and ISDN Test Module.

Warning

See Paragraph “Warnings.”

Command syntax

LoadTE: Download an ESTU or one of its units.

- {[<Unit> {EMM, ITM}],
- [<Nowait> {NOWAIT}]}

Parameter definitions

Table 1-450 LOADTE Parameter Definitions

PARAMETER	VALUE	DEFINITION
Unit	EMM or ITM	Download either EMM or ITM. If no parameter is specified, both modules are downloaded.
nowait	NOWAIT	Provides the user access to the MAP when a download is in progress.

Warnings**Warning: Long time loading task and disabled MAP.**

W1	WARNING : Loading will take a relatively long time to finish. MAP will be disabled during loading. Do you want to proceed ?Please confirm ("YES" , "Y" , "NO" , or "N") :

Explanation

This message warns the user that loading will take a while to finish. Because NOWAIT is not entered, the MAP will be tied up when loading is in progress.

System Action

None.

User Action

Answer "Yes" if user wants to proceed the loading, otherwise, answer "No".

Responses

Response: Download Passed.

R1	<ESTU or EMM or ITM> nnn - LoadTE passed.

Explanation

Download is completed without any problems.

System Action

None.

User Action

None.

Response: Download failed, loss of HSM connection.

R2	<ESTU or EMM or ITM> nnn - LoadTE failed, loss of HSM connection.

Explanation

HSM links to the ESTU are not available.

System Action

The system is unable to obtain an HSM link.

User Action

Ensure that the dedicated HSM interface control lines are idle.

Ensure that the MPC cards are properly loaded and enabled.

Response: Download failed, no response from ESTU.

R 3	<ESTU or EMM or ITM> nnn - LoadTE failed, no response from ESTU.

Explanation

Downloading was in progress but interrupted by a communication failure.

System Action

On interruptions of this sort, the system tries to re-establish communication. After three succeeding failures, the system outputs the preceding response and requires manual intervention.

User Action

Ensure that the dataset on the ESTU is working.
Ensure that the ESTU is connected to the dataset.

After the problems are corrected, user should re-initiate the ESTU downloading from MAP.

It is possible that all HSM links and ESTU are busy with other applications.

Response: Download fail, protocol failures.

R4	<ESTU or EMM or ITM> nnn - LoadTE failed, ESTU protocol failure.

Explanation

Downloading was in progress but was interrupted by a protocol failure while loading the EMM or ITM. Problem originates either from a noisy line or corrupted load file.

System Action

Attempt to send data record, ESTU responds with a NACK. After three succeeding failures, the system prompts the preceding response and requires manual intervention.

User Action

Corrupted data in the load file is a possibility, try obtaining new copy of load file.

Response: Download failed, load versions mismatch.

R5	<ESTU or EMM or ITM> nnn - LoadTE failed, load versions mismatch.

Explanation

Load file datafilled to download the EMM or ITM was changed during download.

System Action

None.

User Action

- First check out the load file WAS changed during download.
- Verify that new download file in table TSTEQUIP and PMLOADS is desired to be re-loaded; otherwise, change back.
- Check the device containing the load file is available.
- Re-attempt the download.

Response: Download fail, ESTU failed to initialize.

R6	<ESTU or EMM or ITM> nnn - LoadTE failed, ESTU failed to initialize.

Explanation

Downloading process completed but ESTU failed to re-initialize.

System Action

None.

User Action

- Reload ESTU download file to the DMS, list the device containing the file, and re-datafill table TSTEQUIP and PMLOADS with recently listed file (if necessary).
- Re-attempt the download.

Response: Download fail, file not found.

R7	<ESTU or EMM or ITM> nnn - LoadTE failed, file not found.

Explanation

File datafiled to download the EMM or ITM is not found on disk.

System Action

None.

User Action

- First make sure the spelling of the file is correct.
- **Verify that download file in table TSTEQUIP and PMLOADS exists by listing the device containing the file.**
- Check the device containing the load file is available.
- Re-attempt the download.

Response: Download failed, unable to communicate with test module.

R8	<ITM> nnn - LoadTE failed, unable to communicate with test module.

Explanation

The EMM is unable to communicate to the ITM. Impossible to download the module.

System Action

None.

User Action

Ensure that hardware connections are properly done.

Response: Download fail, unrecognised module number.

R9	<ITM> nnn - LoadTE failed, unrecognised module number.

Explanation

The ITM module number on the ITM front panel has been changed during download.

System Action

None.

User Action

Verify the ITM module number change. Re-attempt the download.

Response: Download failed, aborted by another user.

R10	<ESTU or EMM or ITM> nnn - LoadTE failed, aborted by another user.

Explanation

While ESTU download is in progress, another user issues "Bsy force" command to the same ESTU from another MAP. This causes the current download aborted.

System Action

None.

User Action

Re-attempt the ESTU download.

Notes

Command issued without the nowait option ties up the map for an estimated period of 35 to 40 minutes. To break the download, issue a BSY FORCE command, from another map, on that ESTU.

Examples

This command perform 1 specific task, downloading the ESTU. The ESTU can be downloaded separately, that is issuing the command specifically to load the EMM,

MAP	Command
ESTU	> LoadTE EMM

and then to load the ITM.

MAP	Command
ESTU	> LoadTE ITM

The ESTU can be downloaded entirely by issuing simply 1 command.

MAP	Command
ESTU	> LoadTE

Parameter NOWAIT can be specified if the user does not want the MAP to be tied up. This is an optional parameter.

MAP	Command
ESTU	> LoadTE nowait

Alarms

Alarm name:

Not applicable

Conditions required to raise the alarm

Not applicable

Duration of the alarm

Not applicable

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Directories

Table of new/modified directories

Table 1-460 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LN_LTP_DIR	Changed		Both	RES

Accessing directory:

The following commands will allow you to access the directory LTP and then exit the MAP and return to CI.

To access

MAPCI;MTC;LNS;LTP

To return to CI

QUIT ALL

Display

New/Modified Display

The display for lines in the DMB state is modified to include the inverse video state. This state is used to indicate the line is DMB because of a DCH babbler condition. Only ISDN¹ lines which are DMB because of a DCH babbler appear in the inverse video state. All other DMB states are in normal video display.

Display Impacts

This change affects the POST position and the three HOLD positions at the LTP level.

¹. DCH MBS lines can also be DMB because of a DCH babbler. These line will still be displayed in the regular video state and not the inverse video state.

Reason for Display

This change is introduced to allow DCH babblers to exist and use the same failure flag "I" as is used for ISDN ICMO lines. This allows users to differentiate between a DCH babbling line and an ISDN ICMO line with its DCH out of service. This also allows the DCH to only clear DCH babbler failure flags and leave ICMO failure flags in the set state.

Sample of Display Change

The following is the change as would be seen at control position at the LTP level of a MAP.

LCC PTY RNG	LEN.....	DN	STA F S LTA TE RESULT
ISDN LOOP	HOST 67 0 00 04	722 2030	■ I

Responses

not applicable

Notes

Not applicable

Examples

Not applicable

Alarms

Not applicable

AR0805mm.ab02

Directories

DCRUTIL

The DCRUTIL directory contains DCR CI utilities. Commands added for this feature will supply users with a way to monitor the status of DCR/NP communication links. When the Dual Link package is present, it also allows the user to manually switch communication from the active link to the standby link.

Table of new/modified directories

Table 1-470 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
DCRUTIL	NEW		SUPERND	RES

Accessing directory: DCRUTIL

To access

DCRUTIL

To return to CI

QUIT

Commands

QUIT

LINKINFO

SWITCH

HELP

Table of New/modified commands**Table 1-480 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUIT	NEW		DCR
LINKINFO	NEW		DCR
SWITCH	NEW		DCR
HELP	NEW		DCR

Command name: QUIT**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The "QUIT" command will remove the "DCRUTIL" directory from the symbol table.

Warning

N/A

Command syntax

QUIT <ALL>

Parameter definitions

Table 1-490 QUIT Parameter Definitions

PARAMETER	VALUE	DEFINITION
ALL	ALL	Return to CI

Parameter: All

Value: N/A

Definition: Return to CI level. Optional.

Responses

CI>

Explanation:

The previous directory prompt is displayed.

System action:

The DCRUTIL directory is removed from the system table.

User action:

N/A

Notes

N/A

Examples

DCRUTIL> Quit

CI>

Command name: LINKINFO

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The "LINKINFO" command will display detailed information about the active and standby links for a network or for all of the networks.

Warning

N/A

Command syntax

LINKINFO <network | >

Parameter definitions**Table 1-500 LINKINFO Parameter Definitions**

PARAMETER	VALUE	DEFINITION
network	alphanumeric or nil	network name

Parameter: network**Value:** any valid network name as defined in table DCRNETID

Definition: Determines which network to display link information for. Optional. If it is left blank, information for all networks is displayed

Responses**Example**

NETWORKA:

Active: NOP SESSION 1, MPC 1, PORT 2, CONV 2

Standby: NOP SESSION 5, MPC 2, PORT 3, CONV 1

NETWORKB:

Active: Unavailable

Standby: Unavailable

Explanation:

The first line displays the network name. The second line displays the NOP session, MPC number, port number and conversation number (MPC ports may support more than one connection or conversation at a time) for the active link of the specified network. The third line displays the NOP session, MPC number, port number and conversation number for the standby link of

the specified network. If a link is currently not available, then "Unavailable" is displayed in place of the other information.

If the dual link package is not present in this load, the third line is not displayed.

If the optional network parameter is not specified, then the above is displayed for each network. If no networks are defined, then "NO NETWORKS DEFINED" is displayed.

System action:

None.

User action:

The user may use this information to assist in maintenance activities.

Notes

N/A

Examples

```
DCRUTIL> LINKINFO TELECOM_DCR
```

```
TELECOM_DCR:
```

```
Active: NOP SESSION 1, MPC 1, PORT 2, CONV 2
```

```
Standby: Unavailable
```

```
DCRUTIL>
```

Command name: SWITCH**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

Available if the Dual Link Package is present.

Command description

The "SWITCH" command will cause a network to switch communication to an available standby link.

Warning

The user is warned that use of this command may result in loss of data between the switch and the NP. The user is then given the choice to continue or cancel the command.

Command syntax

SWITCH <network>

Parameter definitions

Table 1-510 SWITCH Parameter Definitions

PARAMETER	VALUE	DEFINITION
network	alphanumeric	network name

Parameter: network

Value: any valid network name as defined in table DCRNETID

Definition: Determines which network to switch communication on. Non optional.

Responses

Example 1.

TELECOM_DCR:

Communication switches from NOP session 1 to NOP session 5.

Example 2.

TELECOM_DCR:

Switch requires available standby link. No switch performed.

Example 3.

TELECOM_DCR:

Network must be in operation. No switch performed.

Example 4.

TELECOM_DCR:

Unexpected Error. No switch performed.

Explanation:

The first line indicates which network the switch is attempted on. The second line indicates if the switch is successful or not.

System action:

If a standby link is currently available for the network, communication will switch from the active link to the standby link. Messages sent to the NP for

this network will now be sent on the standby link. Messages received on the old active link will be ignored until the NP reprimes it.

User action:

None.

Notes

N/A

Examples

```
DCRUTIL> SWITCH TELECOM_DCR
```

Switch may result in one cycle of lost data between DMS and NP.

Continue (Y/N)?

Y

TELECOM_DCR:Communication switches from NOP session 1 to NOP session 5.

```
DCRUTIL>
```

Command name: HELP**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The HELP command lists the commands available in the DCRUTIL directory and gives a brief description of each.

Warning

N/A

Command syntax

HELP

Responses

RE:
QUIT - RETURN
LINKINFO - SHOW STATUS OF DCR LINKS
SWITCH - SWITCH DCR COMMUNICATION TO STANDBY LINK

Explanation:

N/A

System action:

None

User action:

None.

Notes

N/A

Examples

DCRUTIL> DCR HELP
DCR - SUBCOMMANDS ARE:
QUIT - RETURN
LINKINFO - SHOW STATUS OF DCR LINKS
SWITCH - SWITCH DCR COMMUNICATION TO STANDBY LINK
DCRUTIL>

Alarms**Alarm name:**

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

Chapter 2 Release NA003

The information contained in this document has to do with changes, additions, or deleted information in reference to man-machine interface (MM) or commands. This chapter, NA003, includes information appropriate for the following product computing module loads (PCLs): LEC003, LET003, CDN003, LTT003, USTOPS003, and CDNTOPS003.

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Directories

Table of new/modified directories

Table 2-1 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
IDTDIR	CHANGED		SUPERNODE	RES

Accessing directory: IDTDIR

To access

MAPCI;MTC;PM;POST IDT <n>

To return to CI

QUIT ALL

Commands

Table of New/modified commands

Table 2-2 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUERYPM	CHANGED		IDTDIR
RDTALARM	CHANGED		IDTDIR

Command name:QUERYPM

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command provides information about the peripheral module currently posted at the DMS MAP. When entered with no parameters, the following information is provided:

- PM type
- PM number
- internal number
- node number
- availability of facility protection switching
- C-side XPM (SMA) name
- name of the associated RDT

For this feature, the QueryPM command (for the IDT level of MAPCI) is modified so that the primary operations controller (OPC) ID, and backup OPC ID are suppressed if the IDT/RDT is of type GENTMC or GENCSC.

When QueryPM is entered with the FLT parameter, it displays the in-service/trouble (ISTb) or system-busy (SysB) reasons for the IDT. This functionality is not changed by this feature.

Warning

None.

Command syntax

QueryPM: Query information about the IDT
Parms: [<OPTION> {FLT}]

Parameter definitions

Table 2-3 QUERYPM Parameter Definitions

PARAMETER	VALUE	DEFINITION
OPTION	FLT	Use the FLT parameter to determine the ISTb or SysB reasons for the IDT. This parameter is optional.

Responses

The QueryPM command with no parameters provides information about the IDT currently posted.

The QueryPM command with the FLT parameter provides the in-service/trouble (ISTb) or system-busy (SysB) reasons for the IDT. This functionality is not changed by this feature.

Response for GENTMC or GENCSO RDTs

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	.	.	.	1 IDT	.	.	.	2Crit	.
IDT				*C*				*C*	
0 Quit		PM		SysB	ManB	OffL	CBsy	ISTb	InSv
2 Post_		IDT		0	0	3	0	2	130
3 Listset				0	0	0	0	2	15
4		IDT 3	ISTb	Links_00S:		0			
5 Trnsl									
6		QueryPM							
7 Bsy		PM Type:IDT	PM No: 3	Int. No: 0	Node No: 50				
8 RTS		Prot-Switch: Unavailable							
9 OffL		SMA Name: SMA 1							
10		RDT Name: RDT1 03 0							
11 Disp_		Network Element:	3	RALEIGH_AMEX_B13					
12 Next									
13									
14 QueryPM									
15 RDTalarm									
16 PPS_									
17 Cont_									
18 LoopBk_									
OPERATOR									
Time 14:35									>

Explanation:

- PM Type: The type of PM posted; will always read "IDT" if an IDT is posted.
- PM No: The external ID number of the IDT.
- Int. No: The internal ID number of the IDT.
- Node No: The internal node number of the IDT.
- Prot-Switch: Whether facility protection switching is available or not.
- SMA Name: The C-side XPM of the IDT; will always be SMA <n> if an IDT is posted.
- RDT Name: The name of the RDT associated with this IDT, in the form <site> <frame> <unit> (as datafilled in table RDTINV).
- Network Element: The Network Element number (one to five digits) and Network Element name (zero to twenty characters) of the RDT associated with this IDT.

System action:

None

User action:

None

Notes

The QueryPm response is dependent on the type of IDT posted. Modifications to the response by this feature are for TR-303 (GENTMC or GENCSC) RDTs. For a description of the response provided for AccessNode RFTs, see AF5330MM.

Examples

Please refer to “ Response for GENTMC or GENCSC RDTs” on page 4.

Command name:RDTALARM

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command provides a count of active alarms on the RDT associated with the IDT, sorted by category and severity. This command is modified so that the primary OPC ID and backup OPC ID are displayed only if the RDT is of variant type RFT. In addition,the command is modified so that if the RDT is of type GENTMC or GENCSC, the alarm categories of threshold alert and indeterminate are displayed.

Warning

None.

Command syntax

RDTalarm: Display counts of active RDT alarms and their associated severities and categories.

Parameter definitions

Not applicable.

Responses

The RDTalarm command provides information about alarm counts at the RDT. It also provides information about where the alarms can be tracked by providing the RDT name, Network Element number, and Network Element name.

Invoking the command initiates messaging between the DMS and the RDT to retrieve the current alarm counts. If messaging fails, an error message is displayed and the last known alarm counts are shown.

Response for GENTMC or GENCSC RDTs

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	.	.	.	1 IDT	.	.	.	2Crit	.
				C				*C*	
0 Quit		PM		SysB	ManB	OffL	CBsy	ISTb	InSv
2 Post_		IDT		0	0	3	0	2	130
3 Listset				0	0	0	0	2	15
4		IDT 3	ISTb		Links_00S:	0			
5 Trnsl_									
6		RDTalarm							
7 Bsy		RDT Name: RDT1 03 0							
8 RTS		Network Element: 3 RALEIGH_AMEX_B13							
9 OffL									
10									
11 Disp_									
12 Next									
13		ACTIVE ALARMS	:	Fac	Eqp	Env	Sfw	Svc	Thr
14 QueryPM		-----							Ind
15 RDTalarm		Critical	:	2	0	0	0	0	0
16 PPS_		Major	:	0	1	0	0	0	0
17 Cont_		Minor	:	0	0	0	0	0	0
18 LoopBk_		Warning	:	2	0	1	0	0	1
OPERATOR									
Time 14:35									
>									

Explanation:

The RDT Name and Network Element fields are identical to the fields in the QueryPM response.

The ACTIVE ALARMS table provides the number of alarms of each category and severity that are active at the RDT. Alarm categories are:

- Fac: Facility
- Eqp: Equipment
- Env: Environmental
- Sfw: Software
- Svc: Service
- Thr: Threshold Alert
- Ind: Indeterminate

System action:

None

User action:

If alarms are active (i.e. non-zero counts exist), then the alarms should be tracked and cleared at the corresponding RDT. The RDT Name, Network Element number, and Network Element name, can be used to help determine where the alarms can be tracked. RDT logs can also be used to help determine the nature of the alarms.

Response for GENTMC or GENCSC RDTs (failure condition)

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	.	.	.	1 IDT	.	.	.	2Crit	.
				C				*C*	
IDT				SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM		0	0	3	0	2	130
2 Post_		IDT		0	0	0	0	2	15
3 Listset									
4		IDT 3	ISTb		Links_00S:	0			
5 Trnsl_									
6									
7 Bsy									
8 RTS									
9 OffL									
10									
11 Disp_									
12 Next									
13									
14 QueryPM									
15 RDTalarm									
16 PPS_									
17 Cont_									
18 LoopBk_									
OPERATOR									
Time 14:35									
>									

Explanation:

The RDT Name and Network Element fields are identical to the fields in the QueryPM response.

The failure message “Failed to retrieve alarm counts” indicates that messaging to the RDT failed, and that the current alarm counts cannot be verified. The possible reasons for failure are:

- “Maintenance connection is not established.” This indicates that the EOC based maintenance connection to the RDT is not established, and that messaging to the RDT cannot occur until the problem is corrected.
- “Temporary resource allocation problem.” This indicates that a needed system resource (e.g. memory, messaging buffers, etc.) could not be allocated. The problem may be transient, so the craftsperson should attempt to re-execute the command.
- “No response received from RDT.” This indicates that the DMS has not received a response message containing the active alarm counts. There

may be a problem with the maintenance connection, or there may have been a failure at the RDT.

- “Messaging failure.” This indicates that there is some problem with the messaging protocol between the DMS and the RDT. This may indicate a software load mismatch, or a software error within the DMS or the RDT.
- “Software error -- check logs.” This indicates that an unexpected software error has occurred. The DMS log system should be checked for SWERR logs.
- “Alarm counting not supported by the RDT.” This indicates that the Alarm Count List object class is not supported by the RDT being queried.
- “Alarm counting not configured on RDT.” This indicates that the Alarm Count List object class has not been created yet. The LDS is responsible for creating the object on the RDT.

When such a failure occurs, the last known alarm counts are displayed. The alarms table is stored per IDT and provides the number of alarms of each category and severity that were last known to be active at the RDT. Alarm categories are:

- Fac: Facility
- Eqp: Equipment
- Env: Environmental
- Sfw: Software
- Svc: Service
- Thr: Threshold Alert
- Ind: Indeterminate

Notes

The RDTalarm command response is dependent on the type of IDT posted. Modifications to the response by this feature are for TR-303 (GENTMC or GENCSC) RDTs. For a description of the response provided for AccessNode(RFT) RDTs, see AF5330MM.

Examples

Please refer to “Responses” on page 144 and “Response for GENTMC or GENCSC RDTs (failure condition)” on page 7.

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Directories

No directories have be modified by this feature.

Table of new/modified directories

Table 2-4 New/modified directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Table of New/modified commands

Table 2-5 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
EQUIP	Changed		LTPDATA, PRADCH
CONNECT	Changed		LTPDATA

Command name: EQUIP

Command type

MENU

Command target

BOTH

Command availability

RES

Command description

The command *Equip* defines and seizes data line test and monitor equipment and lines. For digital test access specifically, this command defines the DTA test equipment location. This feature expands the *Equip* command to allow DS1 links on an ESMU to be reserved for DTA equipment. It is also modified to allow an ISDN line card on an RCU to be reserved for DTA equipment.

Warning

No changes.

Command syntax

Figure 2-1 Equip Command Syntax

```

EQUIPment - Define monitor equipment for DU
              or ISDN lines
Parms: <access>
      {DU <Equipment>
        {Mtr <DIR>
          {TX <ID>
            {D <DN> STRING,
              C <CLLI> STRING
              <DIGITS> STRING,
              RLS},
            RX <ID>
            {D <DN> STRING,
              C <CLLI> STRING
              <DIGITS> STRING,
              RLS},
            RLS,
            PREVIOUS},
          Test <ID>
            {D <DN> STRING,
              C <CLLI> STRING
              <DIGITS> STRING,
              RLS,
              PREVIOUS},
            QUERY [<ALL> {ALL}],
            RLS,
            PREVIOUS,
            RESET},
          DTA
          ...
        }
      }

```

Figure 2-1 Equip Command Syntax (cont.)

```

EQUIPMENT - Define monitor equipment for DU
              or ISDN lines
Parms: <access>
    ...
    DTA <equipment>
        {DS1 <xpm>
            {DTCI { <xpmno> {0 TO 511},
                      <port> {0 TO 19}},
              LTC { <xpmno> {0 TO 511},
                      <port> {0 TO 19}},
              DTC { <xpmno> {0 TO 511},
                      <port> {0 TO 19}},
              LGC { <xpmno> {0 TO 511},
                      <port> {0 TO 19}},
              RCC2 { <xpmno> {0 TO 511},
                      <port> {0 TO 47}},
              SMU { <xpmno> {0 TO 511},
                     <port> {0 TO 19}},
            <upchnl> {1 TO 24}
            <downchnl> {1 TO 24}}
        LEN [<SITE> STRING]
            <frame> {0 TO 511}
            <unit> {0 TO 9}
            <DRAWER> {0 TO 31}
            <CIRCUIT> {0 TO 99},
        QUERY [<all> {ALL}],
        RESET <equipno> {1 TO 20}}}

```

Parameter definitions

Parameter definitions are provided only for the DTA portion of the *Equip* command that have been modified by this feature.

Table 2-6 Equip Command Parameter Description

PARAMETER	VALUE	DEFINITION
equipment	DS1 LEN QUERY RESET	Selects which operation is being performed. DS1 and LEN are input to select test equipment residing at a DS1 and an ISLC, respectively. QUERY provided information on currently defined test equipment. RESET frees test equipment.
xpm	DTCI LTC DTC LGC RCC2 SMU (NEW)	Defines the type of node to which DS1 test equipment is attached.
xpmno	0 to 511	Peripheral module number
port	0 to 19	For non-ISLC test equipment, the XPM pside port to which the test equipment is attached. For standard XPMs, this is limited to the range 0 to 19. For the RCC2, this range is 0 to 47.
upchnl	1 to 24	The timeslot on the trunk which carries the upstream data.
downchnl	1 to 24	The timeslot on the trunk which carries the downstream data.

Responses

The following responses have been added to the *Equip* command by this feature.

Response 1

XPM must be provisioned with ISP16 optional card.

Explanation

Non-ISDN capable SMUs cannot be used to define DTA equipment locations. This message appears if the SMU entered is not provisioned with the ISP16 optional card in table LTCINV.

System action

None.

User action

If selecting a DS1 DTA equipment location on an SMU, ensure the SMU is provisioned with the ISP16 optional card in table LTCINV.

Response 2

Cannot EQUIP the last line card of an RCU ISDN line card carrier.

Explanation

This response will result if the user attempts to define DTA equipment on the last line card slot of an RCU ISDN line card carrier. This restriction is imposed because this slot has only one B channel available for ISDN applications.

System action

None.

User action

If selecting an RCU ISDN line card as an equipment monitor location, use one of the first three line cards in the ISDN line card carrier. All of these line cards have two B channels available for ISDN applications.

Notes

None.

Examples

EQUIP DTA DS1 SMU 0 2 23 24

EQUIP DTA LEN RCU0 0 1 3 16

Command name: CONNECT

Command type

MENU

Command target

BOTH

Command availability

RES

Command description

The *Connect* command attaches a B, D, or Bd channel associated with the posted ISDN line to DTA monitoring equipment previously defined by the *Equip* command.

Warning

No change.

Command syntax

No change.

Parameter definitions

No change.

Responses

The following response has been added to the *Connect* command by this feature.

XPM not provisioned with enhanced time switch, cannot CONNECT.

Explanation

This response will result if the user attempts to monitor an ISDN RCU line subtending from an ESMU that is not equipped with the NTAX78AB time switch.

System action

None.

User action

If the ISDN RCU line subtends from an ESMU not equipped with the NTAX78AB time switch, it cannot be monitored using DTA.

Notes

None.

Examples

CONNECT 1 D

CONNECT 1 B1

CONNECT 1 B2

CONNECT 1 Bd ISDN 1

CONNECT VERIFY

CONNECT RLS

Alarms

This section is not applicable.

Alarm name:**Conditions required to raise the alarm****Duration of the alarm**

AF5644mm.aa17**Directories**

PROGDIR and SODIR are directories affected by this feature.

Table of new/modified directories

Table 2-7 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PROGDIR	Changed	N/A	Supernode, BRISC	RES
SODIR	Changed	N/A	Supernode, BRISC	RES

Accessing directory: PROGDIR**To access**

The PROGDIR directory is accessed automatically upon logging into a MAP terminal.

To return to CI

Not Applicable.

Accessing directory: SODIR**To access**

Type SERVORD.

To return to CI

Type QUIT.

Commands

Table of New/modified commands

Table 2-8 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QDN/QLEN	Changed		PROGDIR
COPYSET	New		SODIR
QMODEL	New		PROGDIR

Command name: QDN / QLEN

Command type

NON-MENU

Command target

SUPERNODE, BRISC

Command availability

RES

Command description

The function of the QDN/QLEN command has not changed. This activity introduces line option SETMODEL to the OPTION LIST portion of the QDN/QLEN output. If a line has been assigned the SETMODEL option, then the QDN /QLEN of that line will display the SETMODEL option and the name of the model.

Warning

Not applicable.

Command syntax

The command syntax for the QDN / QLEN command remains unchanged.

Parameter definitions

Table 2-9 QDN/QLEN Parameter Definitions

PARAMETER	VALUE	DEFINITION
DN OR LEN for QLEN	Unchanged	User can specify either a directory number of LEN after QLEN.
DIRECTORY NUMBER for QDN	Unchanged	User can specify a directory number after QDN.

Command name: COPYSET

Command type

NON-MENU

Command target

SUPERNODE, BRISC

Command availability

RES

Command description

Requiring only an unassigned DN, an unassigned LEN and an existing Model Name, new lines can be easily provisioned using the COPYSET Servord command. The customer configuration along with the options that are associated with the model line will be copied over to the new DN and LEN.

Warning

Not Applicable.

Command syntax

COPYSET {SONUMBER} {DN} {LEN} {MODNAME}

Parameter definitions

Table 2-10 COPYSET Parameter Definitions

PARAMETER	VALUE	DEFINITION
SONUMBER	NEW_SO_DUE	The unique number of the service order to be entered.
DN	7/10 digit number	Directory Number
LEN	EXT_LEN	LEN of the DN to be changed. LEN must be HASU.
MODNAME	Any string of up to 32 characters	Name associated with model set.

Command name: QMODEL

Command type

NON-MENU

Command target

SUPERNODE, BRISC

Command availability

RES

Command description

To find out which MODNAMEs are currently being used, a new CI command QMODEL has been created. This command has one optional parameter. The user can specify a Model Name which will list the Model Name and the corresponding LEN. If no parameters are specified then an alphabetized list of existing Model Names and their associated LENs will be displayed. Alphabetic precedence for model names will be: numeric, alpha, and then underscore characters.

Warning

Not Applicable.

Command syntax

QMODEL {MODNAME}

Parameter definitions

Table 2-11 QMODEL Parameter Definitions

PARAMETER	VALUE	DEFINITION
MODNAME	Any string of up to 32 alpha-numeric and/or underscore characters.	Name associated with model set.

Responses

Not Applicable.

Response

Not Applicable.

Explanation:

System action:

User action:

Notes

Examples

Example 1: QLEN of Pset with SETMODEL option

```
>qlen 0 0 0 21
LEN: HOST 00 0 00 21
TYPE: SINGLE PARTY LINE
SNPA: 613
DIRECTORY NUMBER: 7421122
LINE CLASS CODE: PSET (WITH DISPLAY)
CUSTGRP: PPHN SUBGRP: 0 NCOS: 0 RING: Y
ADDONS: NONE EXTENSION: Y RING: N
CARDCODE: 6X21AC GND: N PADGRP: PPHON BNV: NL MNO: Y
PM NODE NUMBER : 18
PM TERMINAL NUMBER : 22
OPTIONS:
RAG PRK GIC GROUP2 1565 Y N
SETMODEL PPHNPSET CXR CTALL N STD CWT Y Y N$
KEY DN
1 DN 7421122
2 DN 7421123
8 GIC 1565 GROUP2 SMDR
KEY FEATURE
1 SETMODEL PPHNPSET
2 AUL 21121
3 CXR CTALL N STD
```

4 CWT Y Y N \$
5 PRK
6 RAG

Example 2 - COPYSET Servord command

>COPYSET \$ 6215000 0 0 3 16 PPHNPSET Y Y
COMMAND AS ENTERED:
COPYSET NOW 93 6 15 PM 6215000 HOST 00 0 03 16 PPHNPSET
The model set contains secondary DN(s). Any options specific to the DN(s)
will not be copied over.

GIC will not be copied over to the new set.

Example 3 - QMODEL CI command for a particular Model Name

>qmodel pphpnset
Model name:LEN:
PPHNPSET HOST 00 0 00 21

Alarms**Alarm name:**

Not Applicable.

Conditions required to raise the alarm

Not Applicable.

Duration of the alarm

Not Applicable.

AF5784mm.aa10**Directories**

N/A

Table of new/modified directories**Table 2-12 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:**To access****To return to CI****Commands**

The following commands are affected by this feature:

1. QueryPM
2. QueryPM Cntrs - the displaying results are changed only when the PM is in MANB state and at ROM level.

Table of New/modified command**Table 2-13 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

N/A

Command name:

N/A

Command type**Command target****Command availability****Command description****Warning****Command syntax****Parameter definitions****Table 2-14 Parameter Definitions**

PARAMETER	VALUE	DEFINITION

Responses**Response****QueryPM Command****Remote PM :**

```

CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      A CM Flt
SysB    ITOC
*C*
RCC2
Quit      PM
RCC2      0      0      5      0      3      0      3      1 2 Post_
4      RCC2      0 ISTb Links_00S: CSide 0 , PSide 0
5 TrnsL_ Unit0: Inact InSv
6 Tst_   Unit1: Act InSv
7 Bsy_   QueryPM
8 RTS_   PM Type: RCC2 PM No.: 0 PM Int. No.: 1 Node_No.: 23
9 Offl_  PMs Equipped: 47 Loadname: WRM34BH2 EEPROM Load: MX77MA24
10 LoadPM_ ESA equipped: NO IntraSwitching is ON
11 Disp_  WARM SWACT is supported and available.
12 Next  RCC2 0 is included in the REX schedule. CM MS IOD Net
PM      CCS      Lns      Trks      Ext      APPL
13 SwAct  REX on RCC2 0 has not been performed.
14 QueryPM Node Status: {OK, FALSE}
15 DCH   Unit 0 Inact, Status: {OK, FALSE}
16 IRLINK Unit 1 Act, Status: {OK, FALSE}
17 Perform Site Flr RPos Bay_id Shf Description Slot EqPEC
18 ISG    REM1 02 A20 CRSC 00 18 RCC2 : 000 MX85AA
Time 12 05

```

Explanation:

Adding “EEPROM Load” is optional field for PMs that have information about the EEPROM load in the inventory table. (The bold letters are just for emphasizing the changes.)

User action:

Typing QueryPM command from MAPCI PM POST level.

Host PM:

```

CM Flt   ManB   TTRF B   .   1RCC2   .   .   1 CC   1Crit   ACBLNK
M         M
LTC
0 Quit           PM           SysB   ManB   OffL   CBsy   ISTb   InSv
2 Post_          LTC           0       3       36       1       7       0
3 ListSet        0       1       2       0       3       0
4
5 Trnsl_         LTC   0 ISTb Links_00S: CSide 0 , PSide 1
6 Tst_           Unit0: Inact InSv
7 Bsy_           Unit1: Act   InSv
8 RTS_           QueryPM
9 OffL           PM Type: LTC PM No.: 0 PM Int. No.: 0 Node_No.: 11
10 LoadPM_       PMs Equipped: 47 Loadname: ELI02CH EEPROM Load: MX77MA24
11 Disp_         WARM SWACT is supported and available.
12 Next          LTC 0 is included in the REX schedule.
13 SwAct         Last REX date was WED. 1993/11/24 at 01:41:17; PASSED.
14 QueryPM       Node Status: {OK, FALSE}
15 DCH           Unit 0 Inact, Status: {OK, FALSE}
16              Unit 1 Act, Status: {OK, FALSE}
17 PERFORM       Site Flr RPos Bay_id Shf Description Slot EqPEC
18 ISG           HOST 02 A18 LTEI 00 32 LTC : 000      6X02NA
CMAP7
Time 13:28 >

```

Explanation:

Adding “EEPROM Load” is optional field for PMs that have information about the EEPROM load in the inventory table. (The bold letters are just for emphasizing the changes.)

User action:

Typing QueryPM command from MAPCI PM POST level.

QueryPM Cntrs Command In Task Level

Remote PM :

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
CM Flt	SysB	ITOC	.	2RCC2	.	.	C	1Crit	ACBLNK
M	M	*C*		M				*C*	
RCC2				SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM		0	1	37	0	7	2
2 Post_		RCC2		0	1	4	0	2	1
3 ListSet									
4		RCC2	0 ManB	Links_00S:	CSide	0 , PSide	0		
5 Trnsl_		Unit0:		ManB					
6 Tst_		Unit1:		ManB					
7 Bsy_		QueryPM cntrs							
8 RTS_		Unsolicited MSG limit = 250,	Unit 0 = 0,	Unit 1 = 0					
9 Offl		Unit 0:							
10 LoadPM_		Ram Load: CRI02CJ1							
11 Disp_		EPRom Version: AC01							
12 Next		EEPROM Load: Loadable: MX77NB01,	Executable: MX77NB01						
13 SwAct		CMR LOAD: CMR33AI5							
14 QueryPM		CMR Definers: 53							
15 DCH		UP:MX77AA							
16 IRLINK		IP:BX01							
17 Perform		Unit 1:							
18 ISG		Ram Load: CRI02CJ1							
CMap3		EPRom Version: AC01							
Time 14:01		MORE...							

NEXT SCREEN: EEPROM Load: Loadable: MX77NB01, Executable: MX77NB01
 CMR LOAD: CMR33AI5
 CMR Definers: 53
 UP:MX77AA
 IP:BX01

Explanation:

The results are the same as the results when the PM is in In Service state.

User action:

Typing "QueryPM Cntrs" command from MAPCI PM POST level.

Host PM:

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL	CM
Flt	ManB	TTRF B	.	1RCC2	.	1 CC	1Crit	ACBLNK	M	
M			*C*			*C*	*C*			
LTC				SysB	ManB	OffL	CBsy	ISTb	InSv	0
Quit	PM			0	3	1	7	0	2 Post_	
LTC		0	1	2	0	3	0	3 ListSet		
4	LTC	0	ManB	Links_00S:	CSide	0	, PSide	1		
5 TrnsL_	Unit0:	Inact	ManB							
6 Tst_	Unit1:	Act	ManB							
7 Bsy_	QueryPM	CNTRS								
8 RTS_	Unsolicited MSG limit = 250,	Unit 0 = 0,	Unit 1 = 0							
9 OffL	Unit 0:									
10 LoadPM_	Ram Load:	ELI02CH								
11 Disp_	EProm Version:	AC01								
12 Next	EEPROM Load:	Loadable: MX77NB01,	Executable: MX77NB01							
13 SwAct	UP:	MX77AA								
14 QueryPM	IP:	BX01								
15 DCH	Unit 1:									
16	Ram Load:	ELI02CH								
17 PERFORM	EProm Version:	AC01								
18 ISG	EEPROM Load:	Loadable: MX77NB01,	Executable: MX77NB01							
	MORE...									
NEXT SCREEN:										
	UP:	MX77AA								
	IP:	BX01								

Explanation:

The results are the same as the results when the PM is in In Service state.

User action:

Typing "QueryPM Cntrs" command from MAPCI PM POST level.

Query PM Cntrs in ROM level

Remote PM :

```

CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      A CM Flt
SysB    ITOC      .      2RCC2      .      .      C      1Crit  AC      M      M
*C*
RCC2
Quit      PM      0      0      SysB      ManB      OffL      CBsy      ISTb      I  0
RCC2      0      0      5      0      3      0      3      ListSet
4      RCC2      0      ManB      Links_00S: CSide 0 , PSide 0
5 Trnsl_      Unit0:      ManB
6 Tst_      Unit1:      ManB
7 Bsy_      QueryPM cntrs
8 RTS_      Unsolicited MSG limit = 250, Unit 0 = 0, Unit 1 = 0
9 Offl      Unit 0:
10 LoadPM_      Unit at ROM Level
11 Disp_      EEPROM Load: Executable: MX77MA24
12 Next      UP:MX77AA
13 SwAct      IP:BX01
14 QueryPM      Unit 1:
15 DCH      Unit at ROM Level
16 IRLINK      EEPROM Load: Executable: MX77MA24
17 Perform      UP:MX77AA
18 ISG      IP:BX01
Time 12 05

```

Explanation:

When the unit is in ManB state, it would be either at Rom level or at TASK level. To differentiate between the two cases the following indication is displayed: “Unit at ROM level “when the unit is at Rom level. This indication is to clarify to the user the short output (.vs. output when at TASK level).

User action:

Typing “QueryPM Cntrs” command from MAPCI PM POST level.

Host PM :

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL	CM
Flt	ManB	TTRF	B	1RCC2	.	1 CC	1Crit	ACBLNK	M	
M			*C*			*C*	*C*			
LTC				SysB	ManB	OffL	CBsy	ISTb	InSv	0
Quit	PM		0	3	36	1	7	0	2	Post_
LTC		0	1	2	0	3	0	3	ListSet	
4		LTC	0	ManB	Links_00S:	CSide	0 , PSide	1		
5	Trnsl_	Unit0:	Inact	ManB						
6	Tst_	Unit1:	Act	ManB						
7	Bsy_	QueryPM	CNTRS							
8	RTS_	Unsolicited MSG	limit = 250,	Unit 0 = 0,	Unit 1 = 0					
9	OffL	Unit 0:								
10	LoadPM_	Unit at ROM Level								
11	Disp_	EEPROM Load: Executable: MX77MA24								
12	Next	UP:MX77AA								
13	SwAct	Unit 1:								
14	QueryPM	Unit at ROM Level								
15	DCH	EEPROM Load: Executable: MX77MA24								
16		UP:MX77AA								
17	PERFORM									
18	ISG									

Explanation:

When the unit is in ManB state, it would be either at Rom level or at TASK level. To differentiate between the two cases the following indication is displayed: "Unit at ROM level" when the unit is at Rom level.

This indication is to clarify to the user the short output (.vs. output when at TASK level).

User action:

Typing "QueryPM Cntrs" command from MAPCI PM POST level.

Notes

N/A

Examples

N/A

Alarms

N/A

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AF5790mm.aa11**Directories**

MVERCCI

Table of new/modified directories**Table 2-15 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
MVERCCI	New		SuperNode	RES

Accessing directory: MVERCCI**To access**

MVRCCI

To return to CI

QUIT

Commands

QUERYDS

QUERYALLDS

SETDS

The Event Report Control is an optional object. An RDT vendor is not required to support this object class. The CI commands provided to query and set the discriminatorState attribute will return a failure when the object class is not supported by the RDT.

Table of New/modified commands**Table 2-16 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUERYDS	NEW		MVERCCI
QUERYALLDS	NEW		MVERCCI
SETDS	NEW		MVERCCI

Command name: QUERYDS**Command type**

Command is NON-MENU.

Command target

Command target is SuperNode.

Command availability

Command availability is RES.

Command description

QUERYDS displays the value of the discriminatorState attribute for either the DS1 or ISDN Event Report Control (ERC) object. The craftperson enters the IDT number and selects either the DS1 or ISDN ERC discriminatorState attribute to query.

Warning

Not Applicable

Command syntax

QUERYDS: Query DS1 or ISDN Event Report Control discriminatorState

Parms: <IDT> {0 TO 255}
 <DSType> { ds1
 isdn}

Parameter definitions

Table 2-17 QUERYDS Parameter Definitions

PARAMETER	VALUE	DEFINITION
IDT	1 to 255	The IDT to be queried.
DSType	ds1 or isdn	The ERC discriminatorState to query.

Responses

The discriminator State value will be displayed as either TRUE or FALSE.

A failure message will be display if any error occurs.

Response 1

”IDT <IDT_NO> <DS1|ISDN> Event Report Control discriminatorState is set to <TRUE|FALSE>”

“Unable to query Event Report Control discriminatorState”

Explanation:

The success response displays the ERC discriminatorState value which can be either set to TRUE or FALSE. TRUE indicates the ERC is active and the discriminatorConstruct is filtering out Threshold Alert events. FALSE indicates filtering is off.

The failure message indicates the command was unable to query the discriminatorState attribute. This can occur because of messaging failure or an error response.

System action:

None

User action:

On a failure, the craftperson should ensure the IDT is INSV. If the IDT is SYSB, MBSY, or ISTB use the PPS QUERY to ensure an EOC is INSV, ACTIVE.

Notes

None

Examples

QEUERYDS 5 ds1

IDT 5 DS1 Event Report Control discriminatorState is set to TRUE

Command name: QUERYALLDS**Command type**

Command is NON-MENU.

Command target

Command target is SuperNode.

Command availability

Command availability is RES.

Command description

QUERYALLDS displays the value of the discriminatorState attribute for both the DS1 and ISDN Event Report Control (ERC) objects for every IDT subtending the LDS. The craftperson needs only to type the command.

Warning

Not Applicable

Command syntax

QUERYALLDS: Querys DS1 and ISDN Event Report Control discriminatorState for all IDTs.

Parms: None

Parameter definitions

Not Applicable

Responses

The discriminatorState values will be displayed as either TRUE or FALSE.

A failure message will be display if any error occurs.

Response 1

"IDT <IDT_NO> DS1 = <TRUE|FALSE|X> ISDN = <TRUE|FALSE|X>"

Explanation:

The success response displays the ERC discriminatorState values which can be either set to TRUE or FALSE. TRUE indicates the ERC is active and the discriminatorConstruct is filtering out Threshold Alert events. FALSE indicates filtering is off.

The "X" indicates the command was unable to query the discriminatorState attributes. This can occur because of messaging failure or an error response.

System action:

None

User action:

On a failure, the craftperson should ensure the IDT is INSV. If the IDT is SYSB, MBSY, or ISTB use the PPS QUERY to ensure an EOC is INSV, ACTIVE.

Notes

None

Examples

QEUERYALLDS

IDT 5	DS1 = TRUE	ISDN = TRUE

...

IDT 25	DS1 = TRUE	ISDN = FALSE

...

IDT 27	DS1 = X	ISDN = X

Command name: SETDS**Command type**

Command is NON-MENU.

Command target

Command target is SuperNode.

Command availability

Command availability is RES.

Command description

SETDS sets the value of the discriminatorState attribute for either the DS1 or ISDN ERC object to True or False. The craftperson enters the IDT number, selects either the DS1 or ISDN ERC discriminatorState attribute and the value to set it to.

Warning

”WARNING - Turning on Treshold Alert notification could cause the SMA this IDT is subtending to go SYSB because of overload.”
Please Confirm (“YES”, “Y”, “NO”, “N”):

Turning on Threshold Alert notification can overload because the SMA does not have any means to regulate the number of Threshold Alert notifications it will receive.

Command syntax

```
SETDS:  Set DS1 or ISDN Event Report Control discriminatorState
Parms:  <IDT> {0 TO 255}
        <DSType> {          ds1
                           isdn}
        <Setting> {        True
                           False}
```

Parameter definitions

Table 2-18 SETDS Parameter Definitions

PARAMETER	VALUE	DEFINITION
IDT	1 to 255	The IDT to be queried.
DSType	ds1 or isdn	The ERC discriminatorState to set.
Setting	True or False	The value the discriminator State will be set to.

Responses

The new discriminatorState value will be displayed if set successfully.
A failure message will be display if any error occurs.

”IDT <IDT_NO> <DS1|ISDN> Event Report Control discriminatorState has been set to <TRUE|FALSE>”

“Unable to set Event Report Control discriminatorState”

Explanation:

The success response displays the new value of the ERC discriminatorState. TRUE indicates the ERC is active and the discriminatorConstruct is filtering out Threshold Alert events. FALSE indicates filtering is off.

The failure message indicates the command was unable to set the discriminatorState attribute. This can occur because of messaging failure or an error response.

System action:

None

User action:

On a failure, the craftperson should ensure the IDT is INSV. If the IDT is SYSB, MBSY, or ISTB use the PPS QUERY to ensure an EOC is INSV, ACTIVE.

Notes

None

Examples

SETDS 5 ds1 True

IDT 5 DS1 Event Report Control discriminatorState has been set to TRUE

AF5839MM.aa06**Directories****Table of new/modified directories****Table 2-19 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LTPISDNDIR	Changed		Both	Res

Accessing directory: LTPISDNDIR**To access**

mapci;mtc;lms;ltpltpisdn

To return to CI

quit all

Commands**Table of New/modified commands****Table 2-20 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QLAYER	Changed		LTPISDNDIR
RLAYER	Changed		LTPISDNDIR
L1BLMALM	Changes		LTPISDNDIR

Command name:

QLAYER

Command type

Menu

Command target

Both

Command availability

RES

Command description

The QLAYER command provides the ability to retrieve layer 1 and 2 performance data for 2B1Q ISDN lines served by the LTC, LGC, RCC2, or SMU. This feature introduces the QLAYER command for 2B1Q ISDN lines served by the SMA. These lines are also 2B1Q loops but since layer 1 performance monitoring is not supported for SMA at this time, the QLAYER command is limited to only retrieving layer 2 performance data for SMA ISDN lines. This is a new behavior for 2B1Q lines on a DMS but is the same restriction for T interface (NTBX26) and pre-2B1Q (NTBX25) lines. Refer to NTP-297-1001-821 "Menu Commands Reference Manual" for complete details on the QLAYER command.

Warning

Not Applicable

Command syntax

No change

Parameter definitions

Table 2-21 QLAYER Command Parameters

PARAMETER	VALUE	DEFINITION
layer	L1	query layer 1 performance monitoring data
	L2	query layer 2 performance monitoring and protocol abnormality data
	FULL	query data of all layers
mode	BE	Block errors
	HIST	History of all performance monitoring data

Table 2-21 QLayer Command Parameters

PARAMETER	VALUE	DEFINITION
	BOTH	both BE and HIST data

This feature makes no changes to the parameters. The parameters can be combined to form the following commands:

1. QLayer
2. QLayer L1
3. QLayer L1 BE
4. QLayer L1 HIST
5. QLayer L1 BOTH
6. QLayer L2
7. QLayer FULL

Responses

Since SMA does not support layer 1 performance monitoring at this time, requests for layer 1 data are rejected.

Response 1

Query of layer 2 parameters

Figure 2-2 Layer 2 Data Query Response

LEN len								
Frames received in total : aaaaa								
Frames received in error : bbbbb								
Frames transmitted in total : ccccc								
Frames retransmitted : ddddd								
Percentage error received : eee.e%								
Percentage retransmitted : fff.f%								
Number of Service Disruptions : ggggg								
Length of Time Disrupted : hhhhh minutes.								
Currently Disrupted : iii								
Error Counts:								
1	2	3	4	5	6	7	8	9
=====	=====	=====	=====	=====	=====	=====	=====	=====
c1	c2	c3	c4	c5	c6	c7	c8	c9

Explanation:

Response 1 is displayed when the commands below are entered for an SMA ISDN line posted at the LTPISDN level of the MAP.

8. QLAYER
9. QLAYER L2
10. QLAYER FULL

The variable definitions from AQ0788 are repeated below for convenience:

Figure 2-3 Layer 2 Data Variables for QLAYER

len	- The LEN the command was issued for
aaaaa	- total number of frames received by the LEN
bbbbb	- total number of frames received with errors
ccccc	- total number of frames sent by the LEN
dddd	- total number of frames retransmitted
eee.e	- percentage of frames received with errors
fff.f	- percentage of frames retransmitted
ggggg	- number of service disruptions experienced by the LEN
hhhhh	- length of time LEN experienced service disruption.
iii	- line currently under disruption - YES/NO
c1..c9	- register values for layer 2 (5 digits each)

System action:

None

User action:

None

Response 2

Query of layer 1 parameters

Figure 2-4 Layer 1 Data Query Response

Layer 1 options are not valid for RDT ISDN lines.

Explanation:

Response 2 is displayed when the commands below are entered for an SMA ISDN line posted at the LTPISDN level of the MAP.

1. QLAYER L1
2. QLAYER L1 BE

3. Qlayer L1 HIST

4. Qlayer L1 BOTH

System action:

None

User action:

None

Notes**Examples****Layer 2 Data Query**

The following MAP display results when the Qlayer, Qlayer L2, or Qlayer FULL command is entered for an SMA ISDN line.

Figure 2-5 MAP Display for Layer 2 Data Query of SMA ISDN Line

```

CM  MS  IOD  Net  PM  CCS  Lns  Trks  Ext  APPL
CM Flt Clock NO AMA . 1EIU 1 RSC . 24 CC 1Crit .
M  M  *C*      *C*  *C*      *C*  *C*
LTPISDN
0 Quit  POST  DELQ      BUSYQ  PREFIX
2 Post_
3      LCC PTY RNG .....LEN.....  DN  STA F S LTA TE RESULT
4      ISDN LOOP  RDT1 01 0 1 26  3210101 IDL
5
6 Sustate
7 BCHCON
8 Ltloopbk
9 DCHCon
10 TEST_  qlayer
11 Hold -  LEN RDT1 01 0 1 26
12 Next
13      Frames received in total      : 10000
14 TstSgnl  Frames received in error    : 100
15 TEI_     Frames transmitted in total : 9899
16 Qloop    Frames retransmitted        : 89
17 Qlayer   Percentage error received   : 1.0%
18 Rlayer   Percentage retransmitted    : 0.9%
ADMIN
Time 13:53 MORE...

```

Figure 2-6 MAP Display for Layer 2 Data Query of SMA ISDN Line (continued)

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
CM Flt	Clock	NO	AMA	.	1EIU	1	RSC	.	24 CC 1Crit .
M	M	*C*		*C*		*C*		*C*	
LTPISDN									
0	Quit	POST	DELQ		BUSYQ		PREFIX		
2	Post_								
3		LCC	PTY	RNG		LEN.....	DN	STA	F S LTA TE RESULT
4		ISDN	LOOP	RDT	1 0 1 26	3210101	IDL		
5									
6	Sustate								
7	BCHCON								
8	Ltloopbk								
9	DCHCon								
10	TEST_								
11	Hold								
12	Next	Number of Service Disruptions : 2							
13		Length of Time Disrupted : 4 minutes.							
14	TstSgnl	Currently Disrupted : NO							
15	TEI_								
16	Qloop	Error Counts:							
17	Qlayer	1	2	3	4	5	6	7	8 9
18	Rlayer	=====	=====	=====	=====	=====	=====	=====	=====
ADMIN		0	5	3	0	0	0	12	0 0

Layer 1 Data Query

The following MAP display results when the QLAYER L1, QLAYER L1 BE, QLAYER L1 HIST, or QLAYER L1 BOTH command is entered for an SMA ISDN line.

Figure 2-6 MAP Display for Layer 1 Data Query of SMA ISDN Line

```

CM   MS   IOD   Net   PM   CCS   Lns   Trks   Ext   APPL
CM Flt Clock NO AMA .   1EIU 1 RSC .   24 CC 1Crit .
M    M    *C*      *C*   *C*      *C*   *C*
LTPISDN
0 Quit   POST   DELQ      BUSYQ   PREFIX
2 Post_
3       LCC PTY RNG .....LEN.....  DN  STA F S LTA TE RESULT
4       ISDN LOOP RDT1 01 0 1 26  3210101 IDL
5
6 Sustate
7 BCHCON
8 Ltloopbk
9 DCHCon
10 TEST_  qlayer l1
11 Hold_  Layer 1 options are not valid for RDT ISDN lines.
12 Next
13
14 TstSgnl
15 TEI_
16 Qloop
17 Qlayer
18 Rlayer
  ADMIN
Time 13:53

```

Command name:

RLAYER

Command type

Menu

Command target

Both

Command availability

RES

Command description

The RLAYER command provides the ability to reset layer 1 and 2 performance data for 2B1Q ISDN lines served by the LTC, LGC, RCC2, or SMU. This feature introduces the RLAYER command for 2B1Q ISDN lines served by the SMA. These lines are also 2B1Q loops but since layer 1 performance monitoring is not supported for SMA at this time, the QLAYER command is limited to only resetting layer 2 performance data for SMA ISDN lines. This is a new behavior for 2B1Q lines on a DMS but is the same restriction for T interface (NTBX26) and pre-2B1Q (NTBX25) lines. Refer to NTP-297-1001-821 “Menu Commands Reference Manual” for more details on the RLAYER command.

Warning

Not Applicable

Command syntax

No change

Parameter definitions

Table 2-22 RLAYER Commnad Parameters

PARAMETER	VALUE	DEFINITION
layer	L1	reset layer 1 performance monitoring data
	L2	reset layer 2 performance monitoring and protocol abnormality data
	FULL	reset data of all layers
mode	CUR	Current registers
	HIST	History of all performance monitoring data
	BOTH	both CUR and HIST data
all_posted	ALL	all loops in posted set

This feature makes no changes to the parameters. The parameters can be combined to form the following commands:

1. RLAYER
2. RLAYER L1
3. RLAYER L1 CUR
4. RLAYER L1 HIST
5. RLAYER L1 BOTH

6. RLAYER L2
7. RLAYER FULL

Each command above can also be appended with the ALL parameter to perform the action on a set of posted lines.

Responses

Since SMA does not support layer 1 performance monitoring, resets of layer 1 data are rejected.

Response 1

Reset of layer 2 parameters

Figure 2-7 Layer 2 Data Reset Response

```

LEN len

Frames received in total : aaaaa
Frames received in error : bbbbb
Frames transmitted in total : ccccc
Frames retransmitted : ddddd
Percentage error received : eee.e%
Percentage retransmitted : fff.f%

Number of Service Disruptions : ggggg
Length of Time Disrupted : hhhhh minutes.
Currently Disrupted : iii

Error Counts:
  1      2      3      4      5      6      7      8      9
=====
  c1      c2      c3      c4      c5      c6      c7      c8      c9

L2 COUNTERS : action

```

Explanation:

Response 1 is displayed when the commands below are entered for an SMA ISDN line posted at the LTPISDN level of the MAP.

1. RLAYER
2. RLAYER L2
3. RLAYER FULL

The variable definitions from AQ0788 are repeated below for convenience:

Figure 2-8 Layer 2 Data Variables for RLAYER

len - The LEN the command was issued for
aaaaa - total number of frames received by the LEN
bbbbb - total number of frames received with errors
ccccc - total number of frames sent by the LEN
ddddd - total number of frames retransmitted
eee.e - percentage of frames received with errors
fff.f - percentage of frames retransmitted
ggggg - number of service disruptions experienced by the LEN
hhhhh - length of time LEN experienced service disruption.
iii - line currently under disruption - YES/NO
c1..c9 - register values for layer 2 (5 digits each)
action - RESET or NOT RESET

System action:

None

User action:

None

Response 2

Reset of layer 1 parameters

Figure 2-9 Layer 1 Data Reset Response

Layer 1 options are not valid for RDT ISDN lines.

Explanation:

Response 2 is displayed when the commands below are entered for an SMA ISDN line posted at the LTPISDN level of the MAP.

1. RLAYER L1
2. RLAYER L1 CUR
3. RLAYER L1 HIST
4. RLAYER L1 BOTH

System action:

None

User action:

None

Notes

None

Examples

Layer 2 Data Reset

The following MAP display results when the RPLAYER, RPLAYER L2, or RPLAYER FULL command is entered for an SMA ISDN line.

Figure 2-10 MAP Display for Layer 2 Data Reset of SMA ISDN Line

```

CM   MS   IOD   Net   PM   CCS   Lns   Trks   Ext   APPL
CM Flt Clock NO AMA .   1EIU 1 RSC .   24 CC 1Crit .
M    M    *C*    *C*    *C*    *C*    *C*
LTPISDN
0 Quit   POST   DELQ   BUSYQ   PREFIX
2 Post_
3       LCC PTY RNG .....LEN.....  DN  STA F S LTA TE RESULT
4       ISDN LOOP RDT1 01 0 1 26  3210101 IDL
5
6 Sustate
7 BCHCON
8 Ltloopbk
9 DCHCon
10 TEST_  rlayer
11 Hold_  LEN RDT1 01 0 1 26
12 Next
13       Frames received in total      :    0
14 TstSgnl Frames received in error      :    0
15 TEI_    Frames transmitted in total   :    0
16 Qloop   Frames retransmitted          :    0
17 Qlayer  Percentage error received     :  0.0%
18 Rlayer  Percentage retransmitted      :  0.0%
ADMIN
Time 13:53 MORE...
```

Figure 2-11 MAP Display for Layer 2 Data Reset of SMA ISDN Line (continued)

```

CM  MS  IOD  Net  PM  CCS  Lns  Trks  Ext  APPL
CM Flt Clock NO AMA . 1EIU 1 RSC . 24 CC 1Crit .
M  M  *C*      *C*  *C*      *C*  *C*
LTPISDN
0 Quit  POST  DELQ  BUSYQ  PREFIX
2 Post_
3      LCC PTY RNG .....LEN.....  DN  STA F S LTA TE RESULT
4      ISDN LOOP  RDT1 01 0 1 26  3210101 IDL
5
6 Sustate
7 BCHCON
8 Ltloopbk
9 DCHCon
10 TEST_  Number of Service Disruptions : 0
11 Hold_  Length of Time Disrupted      : 0 minutes.
12 Next   Currently Disrupted           : NO
13
14 TstSgnl Error Counts:
15 TEI_    1      2      3      4      5      6      7      8      9
16 Qloop   =====
17 Qlayer  0      0      0      0      0      0      0      0      0
18 Rlayer
ADMIN     L2 COUNTERS : RESET

```


Layer 1 Data Reset

The following MAP display results when the RLAYER L1, RLAYER L1 CUR, RLAYER L1 HIST, or RLAYER L1 BOTH command is entered for an SMA ISDN line.

Figure 2-11 MAP Display for Layer 1 Data Reset of SMA ISDN Line

```

CM   MS   IOD   Net   PM   CCS   Lns   Trks   Ext   APPL
CM Flt Clock NO AMA .   1EIU 1 RSC .   24 CC 1Crit .
M    M    *C*      *C*   *C*      *C*   *C*
LTPISDN
0 Quit   POST   DELQ      BUSYQ   PREFIX
2 Post_
3       LCC PTY RNG .....LEN..... DN STA F S LTA TE RESULT
4       ISDN LOOP RDT1 01 0 1 26 3210101 IDL
5
6 Sustate
7 BCHCON
8 Ltloopbk
9 DCHCon
10 TEST_   rlayer l1
11 Hold_   Layer 1 options are not valid for RDT ISDN lines.
12 Next
13
14 TstSgnl
15 TEI_
16 Qloop
17 Qlayer
18 Rlayer
  ADMIN
Time 13:53

```

Command name:

L1BLMALM

Command type

Unlisted Menu

Command target

Both

Command availability

RES

Command description

The L1BLMALM command provides the ability to enable or disable the generation of LINE145 and LINE147 logs on per line basis. This feature enables L1BLMALM for SMA ISDN lines. No changes are made to command use but the error response produced when the command is entered for an unsupported line is revised to indicate that the command is supported for RDTs. Only this revision is shown below. Refer to NTP-297-1001-821 “Menu Commands Reference Manual” for more details on the L1BLMALM command.

Warning

Not Applicable

Command syntax

No change. Refer to NTP-297-1001-821 “Menu Commands Reference Manual”

Parameter definitions

This feature makes no changes to the parameters. Refer to NTP-297-1001-821 “Menu Commands Reference Manual”

The error response revision is shown in Figure 2-12 and Figure 2-1.

Figure 2-12 L1BLMALM Error Response before AF5839

The loop must be on an LCME or an SRU.

Figure 2-1 L1BLMALM Error Response after AF5839

The loop must be on an LCME, SRU, or RDT

Explanation:

The response in “Figure 2-1 L1BLMALM Error Response after AF5839” is displayed when the L1BLMALM command is entered for a line posted at the LTPISDN level of the MAP that does not support the command.

System action:

None

User action:

None

Notes

None

Examples

L1BLMALM Error Response

The following MAP display results when the L1BLMALM command is entered for an unsupported line.

Figure 2-2 MAP Display for L1BLMALM on unsupported Line

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
CM Flt	Clock	NO	AMA	.	1EIU	1	RSC	.	24 CC 1Crit .
M	M	*C*		*C*		*C*		*C*	
LTPISDN									
0	Quit	POST	DELQ		BUSYQ		PREFIX		
2	Post_								
3		LCC	PTY	RNG		LEN.....	DN	STA	F S LTA TE RESULT
4		ISDN	LOOP	HOST	01	0 1 26	3210101	IDL	
5									
6	Sustate								
7	BCHCON								
8	Ltloopbk								
9	DCHCon								
10	TEST_								
11	Hold_								
12	Next								
13									
14	TstSgnl								
15	TEI_								
16	Qloop								
17	Qlayer								
18	Rlayer								
	ADMIN								
	Time	13:53							

Alarms

Alarm name:

Not Applicable

Conditions required to raise the alarm

Duration of the alarm

AG3289MM.AB06**Directories****Table of new/modified directories****Table 2-23 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

Not applicable

To access

Not applicable

To return to CI

Not applicable

Commands

TRAVER, TRNSLVF

Table of New/modified commands**Table 2-24 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	Changed		TRAVER
TRNSLVF	Changed		MAPCI;MTC;TRKS;TTP

Command name: TRAVER, TRNSLVF**Command type**

NON-MENU

Command target

Supernode

Command availability

RES

Command description

TRAVER (TRAnslation VERification) is a low level diagnostic tool that simulates a call from a user-specified origination to a user-specified destination. TRAVER examines and displays translation and routing data for a single call leg and verifies the translation tables.

The TRNSLVF command performs TRAVER on an incoming or two-way trunk posted on the TTP access level of the MAP. The output of TRNSLVF is similar to TRAVER output.

Warning

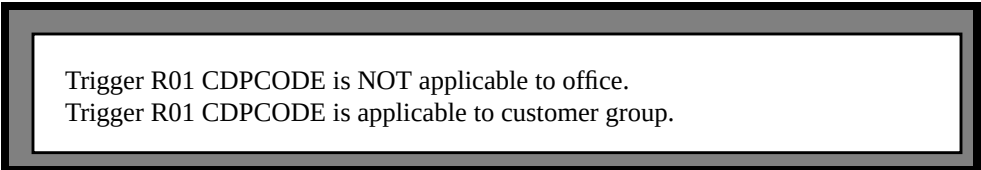
This activity enhances TRAVER and TRNSLVF to display a message if the AIN TRAVER or TRNSLVF encounters a trigger that is either applicable or inapplicable to a subscriber. Similarly, TRNSLVF will display the same message when encountering a trigger that is either applicable or inapplicable to a subscriber.

Command syntax

Not applicable

Responses**Response**

Figure 2-3 Examples of the new message in TRAVER and TRNSLVF.



Trigger R01 CDPCODE is NOT applicable to office.
Trigger R01 CDPCODE is applicable to customer group.

Explanation

This response is generated when TRAVER and TRNSLVF encounter a trigger (e.g. CDPCODE) that is either applicable or inapplicable to the subscriber.

System action

TRAVER and TRNSLVF display this new messages and continue to traverse. The warning message is simply ignored by the system.

User action

If the user intends to keep the subscriber in this AIN group which contains triggers which are not applicable to the subscriber, no action is required. However, if the user decides that the AIN group should not contain any applicable triggers to the subscriber, a new AIN group must be created to contain only the applicable triggers to the subscriber.

Notes

See examples in Command Description Section for usage of TRAVER to display trigger subscription validation.

Examples

In Example 1, a trigger group, AINGRP1, contains a CDPCODE trigger at the INFOANAL TDP (see figure 2-16). The AINGRP1 is then assigned to the office. TRAVER is then used to simulate a call which is originated by a POTS line. Since CDPCODE trigger is not applicable to the office, TRAVER displays a message as indicated in figure 2-16. After TRAVER passes the CDPCODE trigger, it hits the PODP trigger. Because the PODP trigger is assigned to and is applicable to the office and because the trigger criteria are met, the appropriate trigger-criteria-met message is printed.

Figure 2-4 Data provided for AINGRP1 and PODPDIG.

```

>trigdig
>list

```

				KEY	ACTION OPTIONS		TRIGGER

PODPDIG		PODP		613621			PODP
EVENT	TCAP	R01	SS7	AINJAZZ	DFLT		\$

```

TABLD: TRIGGRP
>LIST

```

		KEY	TRIGDATA

AINGRP1 INFOANAL			
(N11 (DG N11DIG) \$ NIL)			
(CDPCODE (CT VBINFO) (DG CDPDIG) \$ NIL)			
(PODP (DG PODPDIG) \$ NIL) \$			

Figure 2-5 Example 1 of new message in TRAVER to illustrate that CDPCODE trigger is not applicable to the office.

```

>traver 1 6211179 6211171 b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL NIL 00 N $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP AINGRP1
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P621 ( 1) (65021) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 621 632 N NP 0 NA
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE HNPACONT
613 984 1 ( 267) ( 1) ( 84) ( 0) 0
. SUBTABLE HNPACODE
. 621 621 DN 613 621
AIN Info Collected TDP: no subscribed trigger.
TABLE TRIGGRP
AINGRP1 INFOANAL
. N11 ( DG N11DIG) $ NIL
Trigger R01 N11 is applicable to office.
. CDPCODE ( CT VBINFO) ( DG CDPDIG) $ NIL
Trigger R01 CDPCODE is NOT applicable to office.
. PODP ( DG PODPDIG) $ NIL
Trigger R01 PODP is applicable to office.
. . TABLE TRIGDIG
. . PODPDIG PODP 613621 PODP EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6136211171 6136211171 SSONLY (AINTST) $
AIN Info Analyzed TDP: trigger criteria met, querying the database.
Use the AINRES option for further information.

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Analyzed TDP: trigger criteria met, querying the database.
Use the AINRES option for further information.

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

```


Example 2 (see figure 2-18) is given to illustrate a trigger group containing a PODP trigger before a CDP trigger. The provided datafill is shown in figure 2-17. In this example, the PODP trigger is assigned before the CDP trigger. Therefore, the PODP trigger is validated before the CDP trigger for subscription checking during run-time call-processing. The call scenario is the same as in Example 1, except that the AINGRP1 trigger group now contains a PODP trigger and a CDP trigger in that order.

Figure 2-6 Data provided for AINGRP1 and PODPDIG.

TABLE: TRIGDIG						
>list 3						
			KEY	TRIGGER		
			ACTION	OPTIONS		

PODPDIG	PODP		6136210000	PODP		
EVENT	TCAP	R01 SS7	AINJAZZ	DFLT	\$	
PODPDIG	PODP		613621	PODP		
EVENT	TCAP	R01 SS7	AINJAZZ	DFLT	\$	
PODPDIG	PODP		613	PODP		
EVENT	TCAP	R01 SS7	AINJAZZ	DFLT	\$	
TABLD: TRIGGRP						
>listT						
			KEY	TRIGDATA		

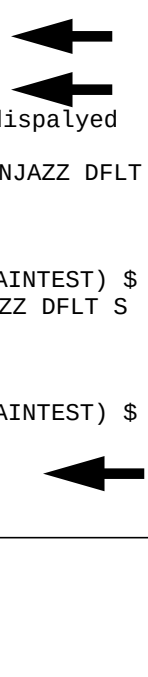
AINGRP1 INFOANAL						
(N11 (DG N11DIG) \$ NIL)						
(PODP (DG PODPDIG) \$ NIL)						
(CDPCODE (CT VBINFO) (DG CDPDIG) \$ NIL)						

Figure 2-7 Example 2 requires AINRES option to demonstrate the new message in TRAVER.

```

>traver 1 6211179 6211171 ainres r01 cont b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL
NIL 00 N $
LCABILL OFF - FILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
TUPLE NOT FOUND
TALBE OFCVAR
AIN_OFFICE_TRIGGRP AINGRP
TABLE STDPRTCT
P621 ( 1) (65021) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 621 632 N NP 0 NA
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS:NONE OVRNONE N
TABLE HNPACONT
613 984 1 ( 267) ( 1) ( 84) ( 0) 0
. SUBTABLE HNPACODE
. 621 621 DN 613 621
TABLE TRRGGRP
AINGRP INFOANAL
. N11 ( DG N11DIG) $ NIL
Trigger R01 N11 is applicable to office.
. PODP * DG PODPDIG) $ NIL
Trigger R01 PODP is applicable to office.
. Continue option: All matched digit criteria will be dispalyed
. . TABLE TRIGDIG
. . . PODPDIG PODP 613621 PODP EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANS17 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6136211171 6136211171 SSNONLY (AINTTEST) $
. . . PODPDIG PODP 613 PODP EVENT TCAP R01 SS7 AINJAZZ DFLT S
. . . TABLE C7GTTYPE
. . . AINJAZZ ANS17 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6136211171 6136211171 SSNONLY (AINTTEST) $
. CDPCODE ( CT VBINFO) ( DG CDPDIG) $ NIL
Trigger R01 CDPCODE is not applicable to office.
AIN Info Analyzed TDP: trigger criteria not met.

```





```
TABLE TOFCNAME
613 621
TABLE DNINV
613 621 1171L HOST 00 0 13 02
AIN Term Attempt TDP: no subscribed trigger.
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LCASCRCN
613 L613 ( 13) OPTL N
. SUBTABLE LCASCR
. 621 623
TABLE PFSTREAT
OPTL NP Y NP UNDT
TABLE CLSVSCRC
KEY NOT FOUND
DEFAULT IS TO LEAVE XLA RESULT UNCHANGED

+++ TRAVER: SUCCESSFUL CALL TRACE +++

DIGIT TRANSLATION ROUTES

1 LINE 6136211171 ST

TREATMENT ROUTES.TREATMENT IS: GNCT
1 *OFLO
2 LKOUT

+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

Example 21 illustrates how TRNSLVF simulates a call from an incoming trunk. The digits 7225028 are received from the incoming trunk ISUPIBNIC. The call first hits the INTEROFF trigger, but INTEROFF trigger is not applicable to trunk ISUPIBNIC and a message is displayed. The call then hits the OFFHKDEL trigger. Since OFFHKDEL is applicable to ISUPIBNIC trunk, the call triggers at OFFHKDEL.

Figure 2-8 Data provided for example 3.

```
>table triggrp
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: TRIGGRP
>list
```

KEY	TRIGDATA

AINGRP2 INFOCOL	
(INTEROFF (DG SHAIODIG) \$ NIL)	
(OFFHKDEL (ESC) \$ JAZZINFO) \$	

```
>table trkgrp
MACHINES NOT IN SYNC - DMOS NOT ALLOWED
JOURNAL FILE UNAVAILABLE - DMOS NOT ALLOWED
TABLE: TRKGRP
>list
```

GRPKEY	GRPINFO

ISUPIBNIC	
IBNTI 0 ELO NCRT COMKODAK 0 0 7224111 ANSDISC 0 Y N N N N N 0	
0 N N N N N \$ NATL (AIN AINGRP2) \$	

Figure 2-9 Example of new message in TRNSLVF.

```

>mapci nodisp;mtc;trks;ttp
MAPCI:
MTC:
TRKS:
SHORT CLLI IS: ISUPIB
POSITION RESTARTED
TTP:
>post g isupibnic
LAST CKTN = 11
SHORT CLLI IS: ISUPIB
OK,CKT POSTED

>trnslvf 7225028 t
TABLE TRKGRP
ISUPIBNIC IBNTI 0 ELO NCRT COMKODAK 0 0 7224111 ANSDISC 0 Y N N N N N N 0 0 N N
      N N N $ NATL (AIN AINGRP2) $
TABLE CUSTSTN
COMKODAK AIN AIN CUSTTRIGGRP_CDP
TABLE OFCVAR
AIN_OFFICE_TRIGGRP AINGRP
TABLE NCOS
COMKODAK 0 0 0 KDKO ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2) ( ACR N)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
COMKODAK PXDK CXDK FTCOMM 0 KDK
TABLE DIGCOL
KDK 7 COL S 1
NCOS PRELIM XLA name is NIL. Go to next XLA name.
TABLE IBNXLA: XLANAME PXDK
TUPLE NOT FOUND
Default is to go to next XLA name.
TABLE IBNXLA: XLANAME CXDK
CXDK 72 ROUTE N N N 2 N 3 25 NDGT Y T IBNRTE 92 $
TABLE DIGCOL
NDGT specified: digits collected individually
TABLE TRIGGRP
AINGRP2 INFOCOL
      . INTEROFF ( DG SHAIODIG)$ NIL
Trigger RO1 INTEROFF is NOT applicable to individual IBN trunk.
      . OFFHKDEL (ESC )$ JAZZINFO
Trigger RO1 OFFHKDEL is applicable to individual IBN trunk.
      .      . TABLE TRIGINFO
      .      . JAZZINFO EVENT TCAP R01 SS7 AINJAZZ DFLT $
      .      .      . TABLE C7GTTYPE
      .      .      . AINJAZZ ANASI7 3 $
WARNING: AINCHG option is not specified for trunk on command line and GTV could
not be determined and defaults to 0.
      .      .      . TABLE C7GTT
      .      .      . AINJAZZ 0000000000 0000000000 SSNONLY (AINTST) $
AIN Info Collected TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

```



Some limitations apply to the use of AIN TRAVER to indicated TRIGGER subscription validation:

- TRAVER will not display subscription checking for trunks at ORIGATT TDP. For example, the R0.1 OFFHKIMM trigger is at the ORIGATT TDP. R0.1 OFFHKIMM is only applicable to individual line subscriber.
- TRAVER will only perform directory number subscription checking on the terminating directory number. For example, if an originating agent is subscribed to OFFHKIMM by AINDN option, which is AIN terminating directory number option, the subscription will not be shown in TRAVER. If the terminating agent (e.g. POTS line) is subscribed to TERMATT by AINDN option, TRAVER will indicate that TERMATT trigger is applicable to the terminating directory number.

Alarms

Alarm name:

Not applicable

Conditions required to raise the alarm

Not applicable

Duration of the alarm

Not applicable

AG3294mm.ad02

Directories

N/A

Table of new/modified directories

Figure 2-10 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Table of New/modified commands

Figure 2-11 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	changed	N/A	TRAVER
TRNSLVF	changed	N/A	MAPCI;MTC;TRKS;TTP

Command name: TRAVER

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAYER (TRANslation VERification) is a low level diagnostic tool that simulates a call from a user-specified origination to a user-specified destination. TRAYER examines and displays translation and routing data for a single call leg and verifies the translation tables.

This activity enhances TRAYER output to display GTV and TT values in an active AIN office if a trigger is encountered and criteria are met.. According to FEATURE AR0229 FN, the GTV value could be derived from ChargeNumber sent from SCP for lines or trunks, or ANI for MF trunks, or CPN for PRI trunks, or ISUP charge number for ISUP trunks. Those are information not available in a simulated call. Therefore the existing TRAYER's BILLNO option and TRNSLVF's CLGNO option have been enhanced to simulate

the digits of ChargeNumber parameter received from SCP if AINRES option is present and the response is either AR (Analyze_Route) or FC (Forward_Call) containing the ChargeNumber parameter, or

the ANI digits for MF trunks, CPN digits for PRI trunks and ISDNUP charge number digits for ISUP trunks otherwise.

Furthermore according to TR-NWT-001284, the ChargeNumber could be 0, 3, 6, or 10 digits number. If the number in BILLNO (or CLGNO) option is not of 3, 6, or 10 digits, but of 12 or less digits, then one or two leading digits will be deleted to obtain a valid number. If it is more than 13 digits, an error message 'Too many digits for Charge Number in Billno (CLGNO) option' is generated and the digits are ignored.

Warning

Not Applicable.

Command syntax

unchanged

Parameter definitions

Table 2-25 TRAYER Parameter Definitions

PARAMETER	VALUE	DEFINITION

N/A

Command name:TRNSLVF

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The TRNSLVF command performs TRAVER on an incoming or two-way trunk posted on the TTP access level of the MAP. The output of TRNSLVF is identical to TRAVER output. Please see TRAVER command description for details.

Warning

Not Applicable.

Command syntax

unchanged

Parameter definitions

Table 2-26 TRNSLVF Parameter Definitions

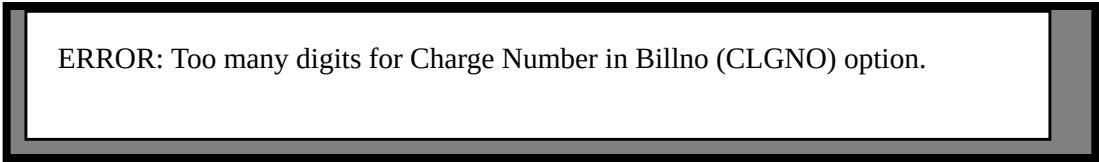
PARAMETER	VALUE	DEFINITION

N/A

Responses

Response

Figure 2-12 Generated error messages



ERROR: Too many digits for Charge Number in Billno (CLGNO) option.

Explanation

This response is generated when the number of digits in BILLNO (CLGNO) is more than 12.

System action

TRAVER and TRNSLVF display the error message and ignores the digits in the option.

User action

User must reenter the command using a number of 12 or less digits in BILLNO or CLGNO option.

Notes

If BILLNO option is present and AUTHCODE option is not, use nil value (N) for AUTHCODE. Otherwise, DMS takes digits for BILLNO as AUTHCODE.

Examples

All examples are based on TRAVER, but the output is identical to TRNSLVF.

Figure 2-13

TRAVER output of POTS line to line, triggering at Origination attempt TDP. THE originating line does not have SPB option.

```
>traver l 6211179 6211171 b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 NLCA TSPS 10 NIL NILSFC LATA1 0 NIL NIL 00 N $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
HOST 02 0 00 01 S AIN AIN AINGRP1 $
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL$
TABLE TRIGGRP
AINGRP1 ORIGATT
. OFFHKIMM (CT VBINFO)$ INFO1 $
. . TABLE TRIGINFO
. . INFO1 EVENT TCAP R0_1 SS7 AINJAZZ DFLT$
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6136211179 6136211179 SSNONLY ( AINTEST)$
AIN Orig Attempt TDP: trigger criteria met, querying the database.
Use AINRES option for further information.

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Orig Attempt TDP: querying the database.
Use AINRES option for further information.

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++
```

Figure 2-14
TRAVER output of POTS trunk to line with spilled ISUP charge number parameter. The trunk triggers SHARED_ INTEROFFICE trigger criteria.

```
>traver tr isupicitt 088110 b n nil 6137225540 nil
TABLE TRKGRP
ISUPICITT IT 63 ITTD NCRT IC NIL MIDL 613 EAP4 NSCR 613 000 N Y (AIN
TRKTRIG2)$
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
TABLE STDPRTCT
EAP4 ( 1 ) ( 0 ) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 088110 088110 SSP DD 6 6 NA
TABLE TRIGGRP
TRKTRIG2 INFOCOL
. INTEROFF ( DG INTERDIG)$ NIL
. . TABLE TRIGDIG
. . INTERDIG INTEROFF 088110 INTEROFF EVENT TCAP R01 SS7 AINJAZZ
DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6137225540 6137225540 SSNONLY ( AINTEST)$

AIN Info Collected TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Collected TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++
```

Figure 2-15 TRAVER output of IBN line to line triggers at OFFHKIMM, gets Analyze_Route with ChargeNumber parameter and retriggers at CDP.

```

>traver l 7225541 25543 b
TABLE IBNLINES
HOST 00 1 08 31 0 DT STN IBN 7225541 COMKODAK 0 0 613 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
HOST 00 1 08 31 0 AIN AIN LINETRIG1
TABLE CUSTSTN
COMKODAK AIN AIN CUSTTRIG
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFFICETRIG
TABLE TRIGGRP
LINETRIG1 ORIGATT
. OFFHKIMM ( CT VBINFO)$ AINSIM
. . TABLE TRIGINFO
. . AINSIM EVENT TCAP R01 SS7 AINJAZZ DFLT $
AIN Orig Attempt TDP: trigger criteria met, querying the database.
Use the AINRES option for further information
+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Orig Attempt TDP: trigger criteria met, querying the database.
Use the AINRES option for further information
+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++
>traver l 7225541 25543 b ainres r01 ar b n nil 6137225542 nil
TABLE IBNLINES
HOST 00 1 08 31 0 DT STN IBN 7225541 COMKODAK 0 0 613 $
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNFEAT
HOST 00 1 08 31 0 AIN AIN LINETRIG1
TABLE CUSTSTN
COMKODAK AIN AIN CUSTTRIG
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFFICETRIG
TABLE NCOS
COMKODAK 0 0 0 KDK0 ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND DIGCOL
COMKODAK PXDK CXDK FTCOMM 0 KDK
TABLE DIGCOL
KDK 2 RPT
NCOS PRELIM XLA name is NIL. Go to next XLA name.
TABLE IBNXLA: XLANAME PXDK
TUPLE NOT FOUND
Default is to go to next XLA name.
TABLE IBNXLA: XLANAME CXDK
CXDK 25 EXTN N N Y 613 722 5 $
TABLE TRIGGRP
CUSTTRIG INFOANAL
. CDPCODE ( DG CDPDIG)$ NIL
. . TABLE TRIGDIG
. . CDPDIG CDPCODE 25543 CDPCODE NOTRANS EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . TABLE C7GTTYPE
. . AINJAZZ ANSI7 3 $
. . TABLE C7GTT
. . AINJAZZ 2132840001 2132840001 SSNONLY ( AINTEST)$

AIN Info Analyzed TDP: trigger criteria met, querying the database.
+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Analyzed TDP: trigger criteria met, querying the database.
+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

```

Alarms

Alarm name:

N/A

Conditions required to raise the alarm

Duration of the alarm

AJ3356mm.ab01**Directories**

N/A

Commands**Table of New/modified commands****Table 2-27 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
RFMTINIT	NEW		PROGDIR
RESTAB	CHANGED		PROGDIR
RFMT	CHANGED		PROGDIR
RFMTDISP	CHANGED		PROGDIR
JFDUMP	CHANGED		PROGDIR
ONPEVAL	CHANGED		PROGDIR
RUNPREPOST	CHANGED		DARTDIR

Command name: RFMTINIT**Command type**

NON-MENU

Command target

BOTH

Command availability

NONRES

Command description

This command will set up the reformat resources required to test a reformat in the lab environment. If a user wants to test a new type reformat, then the user needs to specify which type version will be simulated in the restab file.

This command has several options:

1. The RFMTINIT FILE command allows a user to build a DMOPRO file for the type versions table with the data required to test a type reformat.
2. The RFMTINIT TABLE command can prompt the user to select a type version to use for the dump side representation in RESTAB file if the user specifies the table name to be reformatted. This is done by scanning the logical tuple type for types with a version history, and prompting the user for a specific version for each of these. The default is the current type version.
3. The RFMTINIT TYPE command allows users to specify a single type that is to change. The RFMTINIT command then prompts the user for the dump side type version that is to be used in the RESTAB file. The default is the current type version.
4. The RFMTINIT TRAVERSE command breaks down a complex type into atomic types and prompts the user for the dumpside version of any types with type versions associated with them.
5. The RFMTINIT DUMP command dumps all current type versions for types within a complex type to a file.
6. The RFMTINIT CLEAR command reinitializes RESTAB's copy of the reformat resources.
7. The RFMTINIT TYPEMAP command display the typemap entry for a specified type.
8. The RFMTINIT EQTABLE command displays the equivalent types table.

In order to test a type reformat, the user must first have the software declaring the new type version, and type reformat on the switch. Then the user may choose one of the above options for the RFMTINIT command to setup the reformat resources for his new type reformat.

Warning

Warning: The RFMTINIT command must never be used in the field. This could result in the reformat resources being corrupted.

Command syntax

```
>RFMTINT    FILE <file_name>
             TABLE <table_name>
             TRAVERSE <type_name>
             TYPE <type_name> <type_version>
             DUMP <type_name>
             CLEAR
```


TYPEMAP <type_name>
EQTABLE

Parameter definitions

Table 2-28 RFMTINIT Parameter Definitions

PARAMETER	VALUE	DEFINITION
file	alphanumeric - file name	The name of the DMOPRO file containing the table versions data necessary to test a type reformat. This file will be DMOPRO'd into table versions.
table_name	alphanumeric - table name	The external table name of a table for which the dump side type versions are to be set. Specifying this parameter results in each type in the logical tuple type being scanned for type versions and prompting for a specific dump side type version to be used in the RESTAB file.
type_name	alphanumeric - type name	The name of a type for which the type version is to be set to represent the dump side data in the RESTAB file.
version_number	integer	The type version.

Responses

Explanation:

System action:

User action:

Notes

N/A

Examples

> RFMTINIT FILE TRKGRPFILE

Reformat Resources built in accordance with the data in TRKGRPFILE.

> RFMTINIT TABLE TRKGRP

>rfmtinit table trgrp

The name of the table specified is TRKGRP.

Type EXTENDED_TREATMENT has the following equivalent types.

The following are the entries in the TYPE_MAP2 table.

Starting with the current type and its version.

TYPE	VERSION REFORMAT

EXTENDED_TREATMENT	0

EXTENDED_TREATMENT\$ALLTRTMTUI.EXTENDED_TREATMENT_T

Next par is: <Enter the desired dump version for the type.> {0 TO 32767}

Enter: <Enter the desired dump version for the type.>

>0

The table of dump side type versions has been updated
for the specified types.

>rfmtinit TRAVERSE DEFDATA_LOGTUPLE

The traversing will start at type: DEFDATA_LOGTUPLE.

Type DEFDATA_KEY has the following equivalent types.

The following are the entries in the TYPE_MAP2 table.

Starting with the current type and its version.

TYPE	VERSION REFORMAT

DEFDATA_KEY 1	

DEFDATA_KEY\$V0	1 TYPVERUI.NIL_TYPE

DEFDATA_KEY	0 TYPVERUI.NIL_TYPE

Next par is: <Enter the desired dump version for the type.> {0 TO 32767}

Enter: <Enter the desired dump version for the type.>

>1

Type DEFAULT_DATA has the following equivalent types.

The following are the entries in the TYPE_MAP2 table.

Starting with the current type and its version.

TYPE	VERSION REFORMAT

DEFAULT_DATA	1

DEFAULT_DATA\$V0	1 TYPVERUI.NIL_TYPE

DEFAULT_DATA	0 TYPVERUI.NIL_TYPE

Next par is: <Enter the desired dump version for the type.> {0 TO 32767}

Enter: <Enter the desired dump version for the type.>

>1

The table of dump side type versions has been updated
for the specified types.

>

>rfmtinit eqtable

The size of EQUIVALENT_TABLE2 is 15204.

Type id	Current type	Equivalent type

318	EXTENDED_TREATMENT	EXTENDED_TREATMENT\$ALL

401	TABLE_OWNERSHIP	TABLE_OWNERSHIP\$EQ

410	DATA_SELECTOR	DATA_SEL\$ALL

484	OFFICE_PARM_NAME	OFFICE_PARM_NAME\$ALL

535	DEFDATA_KEY	DEFDATA_KEY\$V0

537	DEFAULT_DATA	DEFAULT_DATA\$V0

1238	VOLUME_TYPE	VOLUME_TYPE\$ALL

```
1496 BANNER_LOGICAL_TUPLE BANNER_LOGICAL_TPL$ALL
7621 DIALPLAN_NAME      DIALPLAN_NAME$ALL
7833 NTX_NAMES          NTX_NAMES$ALL
```

For all other types, the equivalent type is the current type.

Command name: RESTAB**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

The RESTAB CI command is used to test a reformat without doing a data transfer (dump & restore). The testing is done by creating a file with tuples in an old logical tuple representation, and invoking the table's reformat proc on these tuples to convert them to a current representation.

This command is being changed to be BCS identifier independent. The bcs_number parameter does not need to be specified for data moves from bas03 or greater.

Warning**Command syntax**

```
> RESTAB      file_name
```

Parameter definitions

Table 2-29 RESTAB Parameter Definitions

PARAMETER	VALUE	DEFINITION
file_name	alphanumeric	This parameter is used to specify the test data file. This file is in a DMOPRO format, and has table data in an old format.

Responses**Explanation:****System action:****User action:****Notes**

N/A.

Examples

>restab DART\$

Number of tuples added: 1088
Number of tuples replaced: 0
Number of tuples deleted: 0
Number of tuples failed: 0

Command name: RFMT**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is changed such that is no longer BCS identifier dependent. The SET option is deleted.

Warning

N/A.

Command syntax

> RFMT TAB

Parameter definitions

No change.

Responses

Explanation:

System action:

User action:

Notes

N/A

Examples

```
>rfmt tab dart all put file dart$file sfdev  
--- dumping table: DART  
--- Tuples dumped: 1088  
--- return code: 0
```

Command name: RFMTDISP

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

The functionality provided by this CI is being altered to display type versions.
The user interface is not changing.

Warning

Command syntax

```
> RFMTDISP      type_name
                VERSIONS
```

Parameter definitions

Table 2-30 RFMTDISP Parameter Definitions

PARAMETER	VALUE	DEFINITION
type_name	alphanumeric	The external name of a type.
VERSIONS	VERSIONS	Display all known table versions.

Responses

Explanation:

System action:

User action:

Notes

N/A

Examples

```
>rfmtdisp versions
Table versions applied to this load.
=====
None.

Table versions transferred from dump side by MOVEBCS.
=====
None.

>rfmtdisp dart_lt
Type name: DART_LT
Old type name: DART_LT$0
Current type_id: 617
Current version: 1
Old type_id: 618
Old version: 0
```

Command name: JFDUMP**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is changed such that it is no longer BCS identifier dependent. The two parameters, FROM_BCS and TO_BCS are deleted.

Warning

N/A

Command syntax

> JFDUMP journal_file_name output_file_name output_file_device option

Parameter definitions**Table 2-31 JFDUMP Parameter Definitions**

PARAMETER	VALUE	DEFINITION
journal_file_name	alphanumeric	The journal file name.
output_file_name	alphanumeric	The file name to which the journal file records are to be dumped.
output_file_device	alphanumeric	The device to which the file is to be written to.
option	alphanumeric	

Responses**Explanation:****System action:****User action:**

Notes

N/A

Examples

JFDUMP R23456787122345 JFREC SFDEV

Command name: ONPEVAL**Command type**

NONMENU

Command target

BOTH

Command availability

NONRES

Command description

The functionality of this command is changed to display type versions.

Warning

N/A.

Command syntax

> ONPEVAL

Parameter definitions

N/A.

Responses**Explanation:****System action:****User action:**

Notes

N/A.

Examples

>ONPEVAL

Command name: RUNPREPOST

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is changed such that it is no longer BCS number dependent. The dump_bcs option is being removed from the PRE_MOVE and POST_MOVE aspects.

Warning**Command syntax**

> RUNPREPOST OPTION

Parameter definitions

Table 2-32 RUNPREPOST Parameter Definitions

PARAMETER	VALUE	DEFINITION
OPTION	PRE_DUMP, POST_DUMP, PRE_RESTORE, POST_RESTORE, PRE_MOVE, POST_MOVE	This parameter specifies the aspect to be executed.

Responses**Explanation:**

System action:

User action:

Notes

N/A.

Examples

RUNPREPOST PRE_DUMP

Alarms

Alarm name:

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AN0262mm.ac05**Directories**

PROGDIR

Table of new/modified directories**Table 2-33 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PROGDIR	CHANGED		BOTH	RES

Accessing directory:**To access**

Always accessed

To return to CI

Not applicable

Commands**Table of New/modified commands****Table 2-34 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
CALLDUMP	CHANGED		PROGDIR

Command name: CALLDUMP**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays fully formatted billing records at the user's terminal. This command is enhanced by this feature to include the new module code 150, Connection Type and Identification.

Warning

None

Command syntax**Summary:**

CALLDUMP is a tool which allows the user to display fully records the user simply makes a billable call(s), goes formatted billing records at the users terminal. To view onhook, and enters "CALLDUMP".

Parms: [<Stream name (or "PREVIOUS")> STRING]
 [<Format> { HEX,
 FULL}]

Parameter definitions**Table 2-35 CALLDUMP parameter definitions**

PARAMETER	VALUE	DEFINITION
sub-command	STRING	Name of DIRP stream from which records are obtained. Default is AMA
format	HEX, FULL	How to display it (unformatted or formatted.)

Responses

No new responses are provided.

Not applicable

Explanation: None

System action: None

User action: None

Notes

None

Examples

> CALLDUMP FULL

>CALLDUMP FULL

*

HEX ID:	AA	
STRUCTURE CODE:	40752C	
CALL CODE:	192C	ORIG, CALL COMPLETION
...		
MODULE CODE:	150C	CONN TYPE AND ID
CONNECTION TYPE AND ID:		
CONNECTION TYPE:	04	CELLULAR MOBILE
IDENTIFICATION CODE:	01234C	
TRUNK GROUP NUMBER:		
TRUNK GRP SIGNALING TYPE IND:	1	NON-SS7 DIRECT
TRUNK GROUP NUMBER:	0325C	

Alarms

Not applicable

AN0354mm.aa08**Directories**

Not Applicable

Table of new/modified directories**Table 2-36 New/Modified Commands**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Not Applicable

Table of New/modified commands**Table 2-37 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:

Command type

Command target

Command availability

Command description

Warning

Command syntax

Parameter definitions

Table 2-38 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response from RtusEmulMTU

The following comments are generated for the LTP display based on the IRTU test result:

- No Reply from IRTU, Examine IRTU
- Test failed, Examine IRTU
- Command Checksum Failed
- Invalid command received by IRTU
- Invalid parameter received by IRTU
- IRTU fatal error, Examine IRTU
- IRTU current can not be applied
- High current on Tip detected by IRTU
- High current on Ring detected by IRTU
- High current on both Tip and Ring detected by IRTU
- Unknown IRTU error
- Unknown IRTU return code

Response from MONLTA/TALKLTA

The following comments are displayed when there is an error occurred during the monitor/talk connection set up:

- Can not seize the call back path
- Failed to connect Headset to the call back path
- Failed to connect the call back path to IRTU
- Failed to set requested tone by IRTU

MAP LTP Display

All the display using character string “MTU” or “LTU” are replaced with character string “IRTU” when an IRTU is used.

ALT Log

All the log described with character string “MTU” or “LTU” are replaced with “IRTU” when an IRTU is used.

Alarms

Not Applicable

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN0408mm.ab07**Directories**

Not Applicable.

Table of new/modified directories**Table 2-39 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

Not Applicable

To access

Not Applicable.

To return to CI

Not Applicable.

Commands

Not Applicable.

Table of New/modified commands**Table 2-40 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Not Applicable.

Command name:

Not Applicable.

Command type

Not Applicable.

Command target

Not Applicable.

Command availability

Not Applicable.

Command description

Not Applicable.

Warning

Not Applicable.

Command syntax

Not Applicable.

Parameter definitions

Table 2-41 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Not Applicable.

Response

Not Applicable.

Explanation:**System action:**

Not Applicable.

User action:

Not Applicable.

Notes

Not Applicable.

Examples

Not Applicable.

Alarms**Alarm name:**

Not Applicable.

Conditions required to raise the alarm

Not Applicable.

Duration of the alarm

Not Applicable.

Operator Screen Updates

TOPS IV

To show that a call is pre-pay versus post-pay for the non-ACTS case, “Overtime Type: PRE” or “Overtime Type: POST” will be printed in location (ROW 12, COL 10)

Figure 2-1 Non-ACTS Display

1+	COIN PRE		
CLG#	NPA-NXX-XXXX		
CHG XXX.XX	XXX:XX MIN	OC XX	
	NFY XX		
	OVERTIME TYPE: PRE		
			ACS1

In the ACTS case, “PRE” or “POST” appear to be concatenated to “AMT DUE XXX.XX” which appears in location (ROW 12, COL 10).

The TOPS IV ACTS display will either be “AMT DUE XXX.XX PRE” or “AMT DUE XXX.XX POST”. “PRE” or “POST” will appear in location (ROW12, COL 26) as shown below.

Figure 2-2 ACTS Display

1+	COIN PRE		
CLG#	NPA-NXX-XXXX		
CHG XXX.XX	XXX:XX MIN	OC XX	
	NFY XX		
ACTS	AMT DUE XXX.XX	POST	ACS1

TOPS MP

Changes to the MP position are described in the TPC reference document (AN0796).

OPP Position

OPP terminal update changes are described in specific vendor documentation.

AN0409.ab04

TOPS uses two automated systems for credit card validation; They are AABS and ACCS. AABS is the newer and more advanced form of the two automated systems. It is usually the primary automated system used while ACCS is usually used as the back up, in case AABS cannot handle the call for some reason such as lack of resources.

AABS is implemented via an adjunct processor (some form of a Voice Service Node, VSN) that communicates with the DMS via a predefined protocol. Because of the predefined protocol, any vendor can build a version of the VSN. Therefore, the MM changes introduced by VSN features related to validation of commercial credit cards may vary, depending upon the particular implementation of the VSN. Any changes to the MM in the AABS environment should be addressed by the VSN feature that implements that those changes.

ACCS

Prior to this feature, there was no overlap of the leading digits of ISO¹ and 14 digit cards. Therefore, unless a card was in Table INTCCFMT, there was no need to anticipate a 15th digit being entered and no need to await a 15th digit. For 14 digit cards, once the 14th digit was entered ACCS did not wait for a 15th digit to be entered.

Many commercial credit card numbers do overlap with 14 digit calling card numbers. Because of the overlap, when the 14th digit of a billing card is entered it cannot be determined if the subscriber is entering a commercial credit card number (more than 14 digits) or a 14 digit card number (where the 14th digit is the last). This is true only when there is a match in Table INTCCFMT. (If there is no match in Table INTCCFMT, ACCS does not expect more than 14 digits.) Therefore, in the ACCS environment, when 14 digit card numbers with leading digits matching those datafilled in Table INTCCFMT are entered, this feature adds time² to the collection of the card digits. The amount of time added to digit collection for 14 digit cards can be specified by the Telco via new parameter CCV_ACCS_15TH_DIGIT_TIMER in existing Table TOPSPARM. Its value ranges between 1 and 15 seconds.

¹Prior to this feature, the only ISO cards processed by TOPS were CCITT cards.

²If entry of the card number is followed by entry of the pound sign (#), no inter-digit timing delay is incurred. Entry of the pound sign indicates to TOPS that entry of the card has been completed.

AABS

For AABS, the VSN controls digit collection and is responsible for resolving any inter-digit timing issues. Any changes to the MM in the AABS environment should be addressed by the VSN feature that implements that those changes.

It is recommended that, for consistency to the subscriber, the interdigit time interval used in collection of the 15th digit is set to the same value for both the ACCS and AABS environment.

Directories

Not Applicable.

Table of new/modified directories

Table 2-42 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Not Applicable.

Table of New/modified commands

Table 2-43 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:

Command type

Command target

Command availability

Command description

Warning

Command syntax

Parameter definitions

Table 2-44 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response

Explanation:

System action:

User action:

Notes

Examples

Alarms

Not Applicable.

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN0410.ac05**Directories**

DASIMDIR, PROGDIR, PMISTDIR

Table of new/modified directories**Table 2-45 New/modified directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
DASIMDIR	Changed		BOTH	RES
PMISTDIR	Changed		BOTH	RES
PROGDIR	Changed		BOTH	RES

Accessing directory: PROGDIR**To access**

Always accessed

To return to CI

Not applicable

Accessing directory: PMISTDIR**To access**

PMIST

To return to CI

QUIT

Accessing directory: DASIMDIR**To access**

DASIM

To return to CI

LEAVE

Commands

Table of New/modified commands

Table 2-46 Modified commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
POSRSN	Changed		DASIMDIR
LISTING	Changed		DASIMDIR
DATA	Changed		DASIMDIR
SCENCCI	Changed		DASIMDIR
CCBILTYPE	Changed		DASIMDIR
DMSGLIST	Changed		PMISTDIR
DISPLAY	Changed		PMISTDIR
CALLDUMP	Changed		PROGDIR

Command name: POSRSN

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the position request reason to be returned by the CCI DA simulator. The enhancement provided by this feature is to expand the range of available request reasons to include 'SUBSCRIBER'.

Warning

None

Command syntax

>Q POSRSN

COMMAND TO CHANGE THE POS REQUEST REASON USED

Parms: <REASON_NAME> {
 SPLIT,
 PRIORITY,
 MISC,
 SUBSCRIBER}

POSRSN parameter definitions

Table 2-47 POSRSN parameter definitions

PARAMETER	VALUE	DEFINITION
reason-name	split, priority, misc, <i>subscriber</i>	mandatory - specifies the position request reason.

Responses

No new responses

Response

Not applicable

Explanation:

System action:

User action:

Notes

None

Examples

> POSRSN SUBSCRIBER

POS REQUEST REASON IS SET TO: SUBSCRIBER

Command name: LISTING**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the listing status and substatus fields to be returned by the CCI DA simulator for AMA TRANSFER, ARU REQUEST, CC ARU REQUEST and POS RELEASE messages. The enhancement provided by this feature is to expand the range of valid values for the SUBSTATUS7 subcommand to include '5', and to enhance the DISPLAY subcommand to display 'LISTING MARKED AUTO COLLECT SURCHARGE ONLY' when substatus7 is 5.

Warning

None

Command syntax

```
>Q LISTING
COMMAND TO DISPLAY AND CHANGE THE LISTING STATUS USED
Parms: <SUB-COMMAND> {      DISPLAY,
                             STATUS <#> {0 TO 15},
                             SUBSTATUS1 <#> {0 TO 15},
                             SUBSTATUS2 <#> {0 TO 15},
                             SUBSTATUS3 <#> {0 TO 15},
                             SUBSTATUS4 <#> {0 TO 15},
                             SUBSTATUS5 <#> {0 TO 15},
                             SUBSTATUS6 <#> {0 TO 15},
                             SUBSTATUS7 <#> {0 TO 15}}
```

LISTING parameter definitions**Table 2-48 LISTING parameter definitions**

PARAMETER	VALUE	DEFINITION
sub-command	display, substatus1, substatus2, substatus3, substatus4, substatus5, substatus6, substatus7	mandatory - specifies to display or change listing status and which substatus to change..
number	0-15	mandatory for the substatus subcommands - indicates the new value of the substatus to be changed

Responses

The new response provided is to display 'LISTING MARKED FOR AUTO COLLECT SURCHARGE ONLY' when substatus7 is 5 and the 'DISPLAY' subcommand is executed.

Response

Only the changed line is reproduced here.

SUBSTATUS7: 5-LISTING MARKED FOR AUTO COLLECT SURCHARGE ONLY

Explanation:

It means that the listing returned from the CCI DA simulator will be marked auto-collect-surcharge-only.

System action:

None

User action:

None

Notes

None

Examples

```
>LISTING DISPLAY
LISTING STATUS: 15-NIL
SUBSTATUS1:    15-NIL
SUBSTATUS2:    15-NIL
SUBSTATUS3:    15-NIL
SUBSTATUS4:    15-NIL
SUBSTATUS5:    15-NIL
SUBSTATUS6:    15-NIL
SUBSTATUS7:    5-LISTING IS MARKED AUTO COLLECT SURCHARGE ONLY
```

Command name: DATA

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays all the settings used by the simulator. The enhancements introduced by this feature are to display the new SUBSTATUS7 value and the new POSITION REQUEST value. Warning
None

Command syntax

```
>Q DATA
COMMAND TO DISPLAY SIMULATOR DATA
```

DATA parameter definitions

No parameters

Responses

No new responses

Response

Not applicable

Explanation:**System action:****User action:****Notes**

The simulator state (ON/OFF) is now displayed.

Examples

On following page.

>DATA

THE SIMULATOR IS ON

SIMULATOR LINK IS SET TO: FAIL

VENDOR IS SET TO: CCI

THE LANGUAGE IS SET TO: DEFAULT

THE POS REQUEST REASON IS SET TO: USER

THE LOGIN LOGOUT DETAILS IS SET TO: SUCCESS

THE POOLID IS SET TO: 0

THE CC POOLID IS SET TO: 0

LISTING STATUS FIELDS:

LISTING STATUS: 15-NIL

SUBSTATUS1: 15-NIL

SUBSTATUS2: 15-NIL

SUBSTATUS3: 15-NIL

SUBSTATUS4: 15-NIL

SUBSTATUS5: 15-NIL

SUBSTATUS6: 15-NIL

SUBSTATUS7: 5-LISTING IS MARKED AUTO COLLECT SURCHARGE ONLY

ANNOUNCEMENT DATA:

SCEN INDEX	SIM DESCRIPTION	ANN NUMBER
0	AUTO QUOTE DA CALL	0
1	AUTO QUOTE AUTO-INTERCEPT CALL	0
2	AUTO QUOTE ONI-INTERCEPT CALL	0
3	AUTO QUOTE MULTIPLE REQ DA CALL	0
4	AUTO QUOTE WITH RECALL DA CALL	0
5	VOICE QUOTE MEMORY CALL	0
6	VOICE QUOTE DA CALL	0
7	VOICE QUOTE AUTO-INTERCEPT CALL	0
8	VOICE QUOTE AUTO-INTER, NO ARU	0
9	AUTO DA CALL COMPLETION	0
10	AUTO INT CALL COMPLETION; NO ANN	0
11	AUTO INT CALL COMPLETION; ANN	0
12	SERVICE REQUESTS, TA, DA	0

THE SCENARIO SELECTED IS: 9

THE REQUESTED DN IS: 2202011234

THE INTERCEPT ONI/ANIF DN IS: 0000000000

THE CC BILL TYPE IS SET TO: SENTPD

CALL COMPLETION AND ANNOUNCEMENT OPTION IS SET TO: NOCC

TRACING IS ACTIVATED

THE SERVICE REQUEST VALUES ARE SET TO:

END OF SIMULATOR DATA

>

Command name: SCENCCI

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays, sets and selects the scenario the simulator uses for a DA call (in the CCI protocol). This command is enhanced by this feature to include support for the new RELEASE RESOURCE REQUEST message.

Warning

None

Command syntax

```
COMMAND TO MODIFY THE SCENARIO FOLLOWED BY THE SIMULATOR
Parms: <SUB-COMMAND> {      DISPALL,
                             DISPLAY [<INDEX#> {0 TO 23}]
                             SELECT  <INDEX#> {0 TO 23}],
                             MODIFY_DESCRIPT <DESCRIPTION> STRING
                             MODIFY_EVENT <EVENT#. {0 TO 19},
                                     <EVENT> { NIL,
                                             CALLBEGIN,
                                             CALLFLOAT,
                                             CALLSTATUS,
                                             CALLEND,
                                             AMATRANSFER,
                                             ARUREQUEST,
                                             ARUCONNECT,
                                             POSREQUEST,
                                             POSCONNECT,
                                             POSDISCONNECT,
                                             POSRELEASE,
                                             POSSTATUS,
                                             AUDITREQUEST,
                                             AUDITREPLY,
                                             POSREPLY,
                                             CCARUCONNECT,
                                             COMPLETECALL,
                                             EXTENDARUREQ,
                                             SRVREQUEST,
                                             RELEASERESOURCE}
                             <TIME-VALUE> {1 TO 255}
                             <TIME-UNITS> {TENMS,
                                             SECS,
                                             MINS,
                                             HRS,
                                             AEONS}}
```

SCENCCI parameter definitions

Table 2-49 SCENCCI parameter definitions

PARAMETER	VALUE	DEFINITION
sub-command	display, dispall, select, modify_descript, modify_event	mandatory - specifies to display, select which scenario or modify the current scenario.
index#	0 TO 23	identifies which scenario to select or display
event#	0 TO 19	identifies which event in the current scenario is to be modified
event	CALLBEGIN, etc.	identifies which message is to be sent or expected at this point in the call scenario
time-value	1 TO 255	Together with time-units determines how much time to wait until the next event in the scenario.

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

The default scenario 'AUTO QUOTE WITH RECALL DA CALL', will not work when the new reconnect capability is enabled. Three new default scenarios are added - the first two require the new reconnect capability to be enabled, the last requires the new protocol version.

- 'AUTO QUOTE DA - DAS REQUESTED RECALL'
- 'AUTO QUOTE DA - DAS REQUESTED RELEASE'

- ‘NO ANNOUNCEMENT ADACC CALL’

Examples

> SCENCCI MODIFY_EVENT 3 RELEASERESOURCE 10 SECS

>

Command name: CCBILTYPE

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the Call Completion Billing type used by the simulator when requesting completion of a call. This command is enhanced by this feature to include support for the new “operator” billing type.

Warning

None

Command syntax

COMMAND TO SET THE CC BILL TYPE USED

Parms: <CCBILL-TYPE> { NONE,
CONTBIL,
SENTPD,
ALTBIL,
AUTOCOL,
OPERBIL }

CCBILTYPE parameter definitions

Table 2-50 CCBILTYPE parameter definitions

PARAMETER	VALUE	DEFINITION
ccbill-type	none, contbil, sentpd, altbil, autocol, OPERBIL	mandatory - specifies which billing type is to be used in the call completion.

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

```
> CCBILTYPE OPERBIL
```

```
>CC BILL TYPE IS SET TO: OPERBIL
```

Command name: DMSGLIST

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays messages. This command is enhanced by this feature to include formatting for all messaging changes introduced by this feature. Note that parameter FORMAT_PMIST_MPC_DA_MSG in table VROPT must be set to 'FULL' in order to enable this formatting.

Warning

None

Command syntax**DMSGLIST parameter definitions**

Q DMSGLIST
DMSGLIST -- DISPLAYS THE LIST OF INTERCEPTED I/O MESSAGES
Parms: [<NUMBER OF MESSAGES> {1 TO 246}]

Table 2-51 DMSGLIST parameter definitions

PARAMETER	VALUE	DEFINITION
Number of messages	1 to 246	optional - specifies the number of messages to display.

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

> DMSGLIST

```
>DMSGLIST
  (the usual PMIST general header has been removed)

04      MPC NUMBER      = 4
0A      LINK NUMBER     = 4
        CONV NO        = 10
        DAS VENDOR     = CCI
01      MESSAGE TYPE    = CALL BEGIN
FF      SWITCH ID       = NIL
00      DETAIL          = DIRECTORY ASSISTANCE
00 17   CALL ID         = 23
00 33   POS ID          = 51
26 11 11 F1 CALLING DN   = 6211111
14 F1   CALLED DN       = 411
08 21   ORIG INFO       = SPEAK PRIMARY LANGUAGE 8 2 1
28 91   ENTITY ID       = NBEC 2891
01      EXT ORIGINATING INFO
        DP PHONE       = Y
        NO ANN ADACC   = N
53 64   ORIG TRUNK ID   = 3546
```

Command name: DISPLAY

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays messages stored in a file. This command is enhanced by this feature to include formatting for all messaging changes introduced by this feature. Note that parameter FORMAT_PMIST_MPC_DA_MSG in table VROPT must be set to 'FULL' in order to enable this formatting.

Warning

None

Command syntax

Q DISPLAY
DISPLAY -- DISPLAYS THE CONTENTS OF A MESSAGE FILE
Parms: <FILE NAME> FILE name

Parameter definitions

Table 2-52 DISPLAY parameter definitions

PARAMETER	VALUE	DEFINITION
file-name	string	mandatory - specifies the file containing the messages to display

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

```

>DISPLAY TEST1
    (the usual PMIST general header has been removed)

04      MPC NUMBER      = 4
0A      LINK NUMBER     = 4
        CONV NO         = 10
        DAS VENDOR      = CCI
01      MESSAGE TYPE    = CALL BEGIN
FF      SWITCH ID       = NIL
00      DETAIL           = DIRECTORY ASSISTANCE
00 17   CALL ID         = 23
00 33   POS ID          = 51
26 11 11 F1  CALLING DN  = 6211111
14 F1   CALLED DN       = 411
08 21   ORIG INFO       = SPEAK PRIMARY LANGUAGE 8 2 1
28 91   ENTITY ID       = NBEC 2891
01      EXT ORIGINATING INFO
        DP PHONE        = Y
        NO ANN ADACC    = N
53 64   ORIG TRUNK ID   = 3546

```

Command name: CALLDUMP

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays fully formatted billing records at the user's terminal. This command is enhanced by this feature to include the strings for the autocollect options in the listing services record.

Warning

None

Command syntax

Summary:

CALLDUMP is a tool which allows the user to display fully formatted billing records at the users terminal. To view records the user simply makes a billable call(s), goes onhook, and enters "CALLDUMP".

Parms: [<Stream name (or "PREVIOUS")> STRING]
 [<Format> { HEX,
 FULL}]

CALLDUMP parameter definitions

Table 2-53 CALLDUMP parameter definitions

PARAMETER	VALUE	DEFINITION
sub-command	STRING	Name of DIRP stream from which records are obtained. Default is AMA.
format	HEX, FULL	How to display it (unformatted or formatted)

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

> CALLDUMP FULL

>CALLDUMP FULL

*

HEX ID:	AA	
STRUCTURE CODE:	40752C	
CALL CODE:	192C	ORIG, CALL COMPLETION
...		
MODULE CODE:	051C	CALL COMPLETION SERV
OVERSEAS IND:	0C	NPA DIALED
TERM NPA:	00201C	
TERM NUMBER:	2209876C	
COMPLETION IND:	001C	ANSWERED
RATE IND:		
OSS CALL COMPLETION CONDITIONS:		
ASSISTANCE TYPE	3	AUTOMATED
SATELLITE AVOIDANCE	1	NOT REQUESTED
NPA POINT	1	YES
DIALABLE POINT	1	YES
SUBSEQUENT TREATMENT	7	DA REQUEST
ENTERPRISE CALLING	7	AUTO COLLECT SURCHARGE ONLY
RESERVED	0C	
MODULE CODE:	000C	FINAL MODULE

>

Alarms

Not applicable

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Directories

This feature supports the following MAP levels:

- A new PM type (GPP) in the PM level
- The GPP PM type in the CARRIER level.

Table of new/modified directories

Table 2-54 New/Modified directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PM	CHANGED	UNCHANGED		
CARRIER	CHANGED	UNCHANGED		

Accessing directory: PM

To access directory

MAPCI;MTC;PM

To return to CI

QUIT ALL

Commands

The command POST, supported at the MAPCI PM level, is changed in order to support new PM type - GPP. These changes are TL hooks and they are the basis to support GPP.

The following commands support GPP PM type at the MAPCI PM level: LISTSET, TRNSL, TST, BSY, RTS, OFFL, LOADPM, DISP, SWACT, QUERYPM, PMRESET, DISPLAY.

The sub-level PERFORM is available from the MAPCI PM level and the following commands can be executed: DELAYS, PMACT, PFQUERY.

Table of New/modified commands

Table 2-55 New/modified commands in PM directory

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
POST	CHANGED	N/A	PM

Command name: POST

Command type

MENU command

Command target

SuperNode

Command availability

The command is changed in order to support GPP PM type.

Command description

‘GPP’ is added as valid value of parameter pm-type of the POST command.

- GPP PM type.

The POST command allows to access GPP PM.

Warning

N/A

Command syntax

POST {[ALLPMS] [pm-state] [pm-type]} {[ALL] [pm-number]}

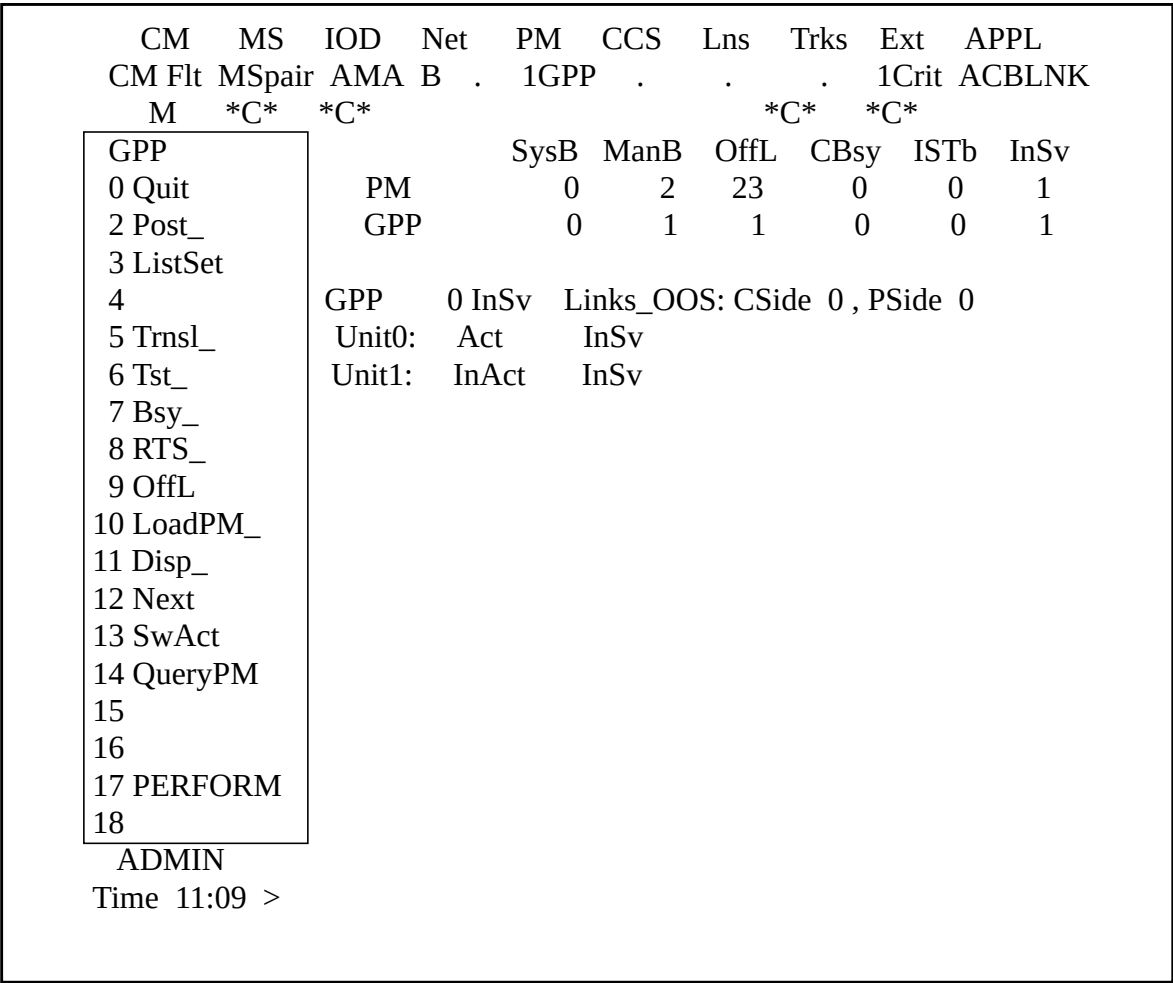
Parameter definitions

Table 2-56 Command POST - parameter definitions

PARAMETER	VALUE	DEFINITION
ALLPMS	All PM types	optional
pm-state	{SysB; ManB; OffL; CBsy; ISTb; InSv }	optional
pm-type	{ ...GPP ...}	optional
ALL	All specified PM	optional
pm-number	particular PM numb. 0-255 for SuperNode	optional

Response

Figure 2-3 GPP Level MAP Display and command menu.



Notes

N/A

Example

- POST GPP ALL

Accessing directory: CARRIER**To access directory**

MAPCI;MTC;TRKS;CARRIER

To return to CI

QUIT ALL

Commands

The CARRIER level is used to access, check and perform maintenance on up to 48 carriers for GPP PM type only. The command POST is changed in order to support GPP PM type.

Table of New/modified commands

Table 2-57 Directory CARRIER - new/modified commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
POST	CHANGED	N/A	CARRIER

Command name: POST**Command type**

MENU command

Command target

SuperNode

Command availability

In the CARRIER level for GPP PM type.

Command description

The POST command is changed in order to allow posting up to 48 carriers on the G

Warning

N/A

Command syntax

POST {[ALLPMS] [carrier-state] [pm-type]} {[ALL] [pm-number]}

Parameter definitions

Table 2-58 Command POST - parameter definitions

PARAMETER	VALUE	DEFINITION
carrier-state	{SysB; ManB; InSv; OffL; UnEq}	optional
pm-type	{...GPP...}	optional
ALL	All specified PM	optional
pm-number	particular PM numb.	optional

Response

The response is changed in order to support 48 carriers.

For an example of the POST command's response See "GPP CARRIER level" on page 121.

Figure 2-4 GPP CARRIER level

	CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL	
	CM Flt	MSpair	AMA	B	1 GPP	.	.	2 GC	1Crit	ACBLNK	
	M	*C*	*C*		*C*			*C*	*C*		
POST		CLASS	ML	OS	ALARM	SYSB	MANB	UNEQ	OFFL	CBSY	PBSY
0 Quit_		TRUNKS	0	0	0	0	0	0	124	0	0
2 Post_		REMOTE	0	0	0	0	62	0	0	0	0
3		D30									
4		NO CLASS	SITE		GPP	CKT D	ALARM	SLIP	BER	CRC4	STATE
5 Loop_	0	REMOTE	HOST		0	43 C					INSV
6 Tst_	1	REMOTE	HOST		0	44 C					INSV
7 Bsy_	2	REMOTE	HOST		0	45 C					INSV
8 RTS_	3	REMOTE	HOST		0	46 C					INSV
9 OffL_	4	REMOTE	HOST		0	47 C					MANB
10		SIZE OF POSTED SET : 48									
11 Disp_		CARRIER:									
12 Next		POST:									
13											
14 Detail_											
15											
16											
17											
18											
ADMIN											
Time 11:52 >											

Notes

N/A

Examples

- POST GPP ALL
- POST INSV

CI Command

XBERT

XPM Bit Error Ratio Testing system is available for GPP peripheral module as an CI command 'XBERT'.

XBERT is capable of two separate tests which handle different hardware components in the PM speech and data paths. The test names are:

- XBERTHLP
- XBERTPSL

For more information about CI command XBERT's application please refer to feature AN0541 "GPP PM and Carrier MTC".

PMDEBUG

PMDEBUG is a non-resident debug tool intended for development use, and provides access to monitor tasks from a MAP terminal. It is implemented as a CI increment.

PMDEBUG tool is changed in order to support GPP.

AN0718mm.aa10

This feature implements changes to the MAP MMI. No changes are made to the TAMI MMI.

QUERYPM FLT command at TPC level of the MAP

The QUERYPM FLT command at the TPC level of the MAP lists the fault reason(s) whenever a TPC is in state ISTb. For the SHI link fault introduced by this feature, the fault reason text is:

‘SHI link(s) out of service’.

PM Subsystem MAP Alarms

The following **new** alarm conditions will now generate a TPC alarm under the PM Banner:

- One of a TPC’s SHI links is out of service (minor alarm)
- Both of a TPC’s SHI links are out of service (major alarm)

The functionality of other TPC alarm conditions will not change. The following TPC alarm condition **existed before this feature**, and will not be affected by this feature:

- TPC is SysB or CBsy (critical alarm)

TPC Alarm Resolution

To resolve a TPC alarm, the craftsperson uses MAP commands following a process similar to the alarm resolution guidelines given in *TOPS MP Alarm and Performance Monitoring Procedures* (NTP297-2281-521). When a TPC major or minor alarm appears, the craftsperson proceeds through the following steps:

1. Post all TPCs that are ISTb, using MAP command
“MAPCI;MTC;PM;POST TPC ISTB”
2. Use the QUERYPM FLT command, to determine the fault for each TPC.
3. For each TPC that reports a ‘SHI link(s) out of service’ fault, go to the TAMI and follow standard maintenance procedures to bring the SHI links (HSDA Card 0 links) out of the OOS condition. Refer to *DMS-100 Family TOPS MP Maintenance Guide* (NTP 297-2281-520) for maintenance instructions concerning HSDA links.

In addition, PM128 and PM115 logs can be monitored.

Example MAP Screens

A TPC with one SHI link out of service is posted at a MAP

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
-	-	-	-	1 TPC	-	-	-	-	-
TPC				SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM		0	0	0	0	1	28
2 Post_		TPC		0	0	0	0	1	0
3									
4		TPC	0	ISTb					
5 Trns1									
6 Tst									
7 Bsy									
8 RTS									
9 OffL									
10									
11 Disp_									
12 Next									
13									
14 QueryPM									
15 MP									
16									
17									
18									
TEAM10									
Time 18:38									

minor alarm reported by 1 TPC

Posted TPC is In-Service-Trouble

Total number of In-Service-Trouble TPCs

Results of QUERYPM FLT command

QUERYPM FLT
The following node inservice troubles exist:
SHI link(s) out of service

A TPC with both SHI links out of service is posted at a MAP

AN0727mm.aa05

Directories

No directories will be affected by this feature.

Accessing directory:

To access

To return to CI

Commands

All the Query commands for line options will be modified to include the SBLF feature for a given SBLF monitoring set.

None of the existing commands or their syntax will be changed or deleted by this feature.

AN0796mm.aa17

Feature title -- MM

The MM section of this feature document discusses the human-machine interface changes introduced by all TPC Human Machine Interface changes introduced in the TPC03 stream. The following are included:

- CCI protocol enhancements for ADAS Plus
- Automated Room and Authorization Number (ARAN)
- Calling Card Denial Reasons Displays and Announcements (CCDR D&A)
- TOPS MP Password Update Enhancement
- Assistant Request Functions
- Expanded Hardkeys
- Pre-paid Coin Overtime
- Assistance OGT Key Enhancement

MM-ADAS+

Background

In the past, at call arrival the DAS could optionally fill in some or all of the MP data entry fields, and also optionally set the search modifier indicator (RES, BUS, GOV, ...). Specifically, the MP data entry fields are name1, name2, name3, street1, street2, locality, area1, and area2. With this feature, the DAS can also optionally set the ARU language indicator and optionally highlight any subset of the data entry fields, search modifier (RES, BUS, GOV, ...), and the ARU language indicator field.

Previous to this feature, prior to any operator input, a typical NAS(CCI) DA call presentation MP screen might have resembled figure 1 on the following page. Note that name1, name2, name3, street1, street2, area1, area2, and search modifier fields are not initialized, and the ARU language is defaulting to the primary language, in this case “E” for English. Also note that there is no highlighting of the entry fields, search modifier, and ARU language indicator field.

#000374 GL006 ANNOUNCEABLE				E	12:00	L1 	L2
Loc CARY	Nm/Li			St		Ar	
DA 555-For							
Clg ▶	619-322-7000						
Carrbor Raleigh	Mini Ci Cary	Knightd Morrisv	Carpent Garner	Creedmo Wake Fo	Pittsbo Apex	Bypass Durham	Res Tri Chapel

Figure 2-5 Previous example DAS call presentation.

Changes

Although it is impractical to show a thorough set of possibilities, two new MP screen examples follow. Figure 33below shows a DA call presentation screen prior to any operator input. Note that the locality, name1, and language indicator are initialized and not highlighted. In the case of ADAS Plus, this could be used to indicate that ADAS Plus was able to confidently recognize these fields since none of the initialized fields were highlighted. Note also that the search modifier field has been initialized to “BUS” for business.

#000374 GL006 ANNOUNCEABLE				BUS S		12:00	L1 	L2
Loc	CARY	Nm/Li	VALDEZ		St		Ar	
DA	555-For							
Clg ▶	619-322-7000							
Carrbor Raleigh	Mini Ci Cary	Knightd Morrisv	Carpent Garner		Creedmo Wake Fo	Pittsbo Apex	Bypass Durham	Res Tri Chapel

Figure 2-6 New DAS call presentation - example 1.

Figure 34 below shows a DA call presentation screen where the DAS highlighted the ARU language indicator. The language indicator has been initialized and highlighted. The locality field has been initialized and not highlighted. The name1 field has been highlighted and not initialized. In the case of ADAS Plus, the highlighting of the initialized language field may be used to indicate a low recognition confidence level; the highlighting of the uninitialized name1 field may be used to indicate an extremely low recognition confidence level; and the unhighlighting of the initialized locality field may be used to indicate a high recognition confidence level.

#000374 GL006 ANNOUNCEABLE RES E				12:00	L1 	L2
Loc CARY	Nm/Li		St	Ar		
DA 555-For						
Clg ▶	619-322-7000					
Carrbor Raleigh	Mini Ci Cary	Knightd Morrisv	Carpent Garner	Creedmo Wake Fo	Pittsbo Apex	Res Tri Chapel

Figure 2-7 New DAS call presentation - example 2.

Final notes:

1. Currently, ADAS Plus is only being implemented as part of NAS DAS, but potentially an ADAS Plus like feature could be implemented as part of Volt Delta DAS or BT DAS, both of which use the CCI(NAS) protocol. The figures shown in this document section though, only apply to MP screens for NAS DAS.
2. Even though DA 555-Foreign call presentations were shown in this document, displays for other DA call types would be similar.
3. At any given site, the number of DA entry fields that the DAS attempts to populate depends on the DAS version and set up. In any case though, the TPC will transparently handle these type of site to site variations in the DAS.

MM - ARAN

TOPS MP changes

The ARAN feature introduces the hotel room and authorization number changes which are listed in the following table. These scenarios are possible upon call arrival or while at the operator.

Type	Scenario	Room Number	Authorization Number
REQUESTED	The collection of a room or authorization number is requested.	R	A
VALIDATED	The collection of a room or authorization number is validated.	R xxxxxx ^a	A xxxxxx ^b
INVALIDATED	The collection of a room or authorization number is invalidated.	R ?	A ?
REQUIRED	The collection of a room or authorization number is required.	R: ?	A: ?

Table 2-59 Room and Authorization Number Scenarios

a. For the room number, six characters can be supplied. Numerics are treated as one character each, and the upper case alphabetic letters are treated as two characters each. For example, (123456, W1212, WW12, & WWW) are acceptable combinations, however (WWWW, WWW1, & WW123) are unacceptable combinations since they exceed the six character limitation.

b. The authorization number has the same restriction as the room number for its six character display.

In addition to hotel room and authorization number changes, ARAN also presents a new call type, Institution.

The following figures illustrate the screen changes introduced by the ARAN feature. Please note that the hotel calls in the examples are shown as 1+. There are, however, some situations when 0+ Hotel calls would apply to the ARAN feature. The display for 0+ Hotel calls is the same as the one for 1+ Hotel except that the "1+" is replaced by a "0+."

		12:00	L1 📞	L2
TOLL 1+ Hotel Clg 619-322-7000 Cld Spl IC Misc▶ R				
No AMA Notify Charge Adjust Time Charges Name				

Figure 2-8 1+ Hotel call with room number requested

This figure illustrates a call in which the room number has not been entered and therefore, needs to be collected by the operator. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the first box to the right of the Misc label, the cursor appears. This is where the room number will be entered. In the second box to the right of the Misc label, an “R” appears. This is where the room number will be displayed. Note that the French and Spanish displays for hotel would be the same as in English. However, the French display for room would be “C” and the Spanish display would be “H” as opposed to the English “R.”

		12:00	L1 	L2
TOLL 1+ Hotel				
Clg	619-322-7000			
Cld				
Spl				
IC				
Misc▶	—	A		
No AMA Notify Charge Adjust Time Charges Name				

Figure 2-9 1+ Hotel call with authorization number requested

This figure illustrates a call in which the authorization number has not been entered and therefore, needs to be collected by the operator. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the first box to the right of the Misc label, the cursor appears. This is where the authorization number will be entered. In the second box to the right of the Misc label, an “A” appears. This is where the authorization number will be displayed. Note that the French and Spanish displays for hotel would be the same as in English. Additionally, the displays for authorization are the same.

		12:00	L1 	L2
TOLL 1+ Hotel				
Clg	619-322-7000			
Cld				
Spl				
IC				
Misc▶	—	A 123456		
No AMA	Notify	Charge Adjust		
		Time Charges	Name	

Figure 2-11 1+ Hotel call with authorization number validated

This figure illustrates a call in which the authorization number has been successfully collected. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the first box to the right of the Misc label, the cursor appears. In the second box to the right of the Misc label, an “A” appears along with the valid authorization number. Note that the French and Spanish displays for hotel would be the same as in English. Additionally, the displays for authorization are the same.

		12:00	L1 👤	L2

TOLL		1+ Hotel	
Clg	619-322-7000		
Cld			
Spl			
IC			
Misc▶	—	R ?	

No AMA	Notify	Charge Adjust		Time Charges	Name		

Figure 2-12 1+ Hotel call with room number invalidated

This figure illustrates a call in which an invalid room number has been entered by the operator. Since the number that was entered is invalid, it needs to be reentered by the operator. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the second box to the right of the Misc label, an “R” appears along with a question mark indicating that an invalid room number has been entered. Note that the French and Spanish displays for hotel would be the same as in English. However, the French display for room would be “C” and the Spanish display would be “H” as opposed to the English “R.” This feature has not changed this call scenario.

		12:00	L1 	L2
TOLL 1+ Hotel				
Clg	619-322-7000			
Cld				
Spl				
IC				
Misc▶	—	A ?		
No AMA	Notify	Charge Adjust		
		Time Charges	Name	

Figure 2-13 1+ Hotel call with authorization number invalidated

This figure illustrates a call in which an invalid authorization number has been entered by the operator. Since the number that was entered is invalid, it needs to be reentered by the operator. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the second box to the right of the Misc label, an “A” appears along with a question mark indicating that an invalid authorization number has been entered. Note that the French and Spanish displays for hotel would be the same as in English. Additionally, the displays for authorization are the same.

		12:00	L1 📞	L2

TOLL		1+ Hotel	
Clg	619-322-7000		
Cld			
Spl			
IC			
Misc▶	—	R: ?	

No AMA	Notify	Charge Adjust		Time Charges	Name		

Figure 2-14 1+ Hotel call with room number required

This figure illustrates a call in which an operator attempted to release the call without collecting the required room number. Since the room number is missing, it needs to be entered by the operator. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the second box to the right of the Misc label, an “R:” appears along with a question mark indicating that the room number has not been collected. Note that the French and Spanish displays for hotel would be the same as in English. However, the French display for room would be “C” and the Spanish display would be “H” as opposed to the English “R.” This feature has not changed this call scenario.

		12:00	L1 📞	L2
TOLL 1+ Hotel				
Clg	619-322-7000			
Cld				
Spl				
IC				
Misc▶	—	A: ?		
No AMA	Notify	Charge Adjust		
		Time Charges	Name	

Figure 2-15 1+ Hotel call with authorization number required

This figure illustrates a call in which an operator attempted to release the call without collecting the required authorization number. Since the authorization number is missing, it needs to be entered by the operator. The call is identified as a toll 1+ Hotel call and the calling number is displayed in the Clg field. In the second box to the right of the Misc label, an “A:” appears along with a question mark indicating that the authorization number has not been collected. Note that the French and Spanish displays for hotel would be the same as in English. Additionally, the displays for authorization are the same.

		12:00	L1 	L2
TOLL 1+ Inst				
Clg	619-322-7000			
Cld				
Spl				
IC				
Misc▶	—	A 123456		
No AMA	Notify	Charge Adjust		
		Time Charges	Name	

Figure 2-17 Institution call with authorization number validated

This figure illustrates a call which is presented as an Institution call in which an authorization number has been successfully collected. The call is identified as a toll 1+ Inst call and the calling number is displayed in the Clg field. In the first box to the right of the Misc label, the cursor appears. In the second box to the right of the Misc label, an “A” appears along with the valid authorization number. Note that the French and Spanish displays for institution would be the same as in English. Additionally, the displays for authorization are the same.

MM - CCDD D&A

TOPS MP CHANGES

The following figures illustrate the screen changes introduced by the CCDD D&A feature:

Srv Den		12:00	L1 	L2

TOLL	0+			
Clg	619-322-7000			
Cld	919-344-5678			
Spl	<613-220-0000-2201>			
IC				
Misc				

No AMA	Notify	Charge Adjust	Dial Rate	Time Charges	Name	Hotel	

Figure 2-18 0+ call with a denial reason of *Srv Den* (English).

The above figure illustrates a call in which a service denial has been issued. The call is identified as a toll 0+ call and the calling and called numbers are displayed in the Clg and Cld fields, respectively. The cursor appears in the Spl field and a flashing calling card number is displayed in the Spl field. Note that the <> in the figure represent the flashing mode. The French equivalent of *Srv Den* would be *Refusé* and the Spanish would be *Rehusa*.

Thr Exc		12:00	L1 	L2

TOLL	0+	
Clg	619-322-7000	
Cld	919-344-5678	
Spl ▶	<613-220-0000-2201>	
IC		
Misc		

No AMA	Notify	Charge Adjust	Dial Rate	Time Charges	Name	Hotel	

Figure 2-19 Illustration of a 0+ call with a denial reason of Thr Exc.

The above figure illustrates a call in which a threshold exceeded denial has been issued. The call is identified as a toll 0+ call and the calling and called numbers are displayed in the Clg and Cld fields, respectively. The cursor appears in the Spl field and a flashing calling card number is displayed in the Spl field. Note that the <> in the figure represent the flashing mode. The French equivalent of *Thr Exc* would be *Max App* and the Spanish would be *Max Exc*.

Non Pmt		12:00	L1 	L2

TOLL	0+	
Clg	619-322-7000	
Cld	919-344-5678	
Spl	<613-220-0000-2201>	
IC		
Misc		

No AMA	Notify	Charge Adjust	Dial Rate	Time Charges	Name	Hotel	

Figure 2-20 0+ call with a denial reason of Non Pmt.

The above figure illustrates a call in which a non-payment denial has been issued. The call is identified as a toll 0+ call and the calling and called numbers are displayed in the Clg and Cld fields, respectively. The cursor appears in the Spl field and a flashing calling card number is displayed in the Spl field. Note that the <> in the figure represent the flashing mode. The French equivalent of *Non Pmt* would also be *Non Pmt* and the Spanish would be *No Pago*.

Srv Res		12:00	L1 	L2

TOLL	0+		
Clg	619-322-7000		
Cld	919-344-5678		
Spl	<613-220-0000-2201>		
IC			
Misc			

No AMA	Notify	Charge Adjust	Dial Rate	Time Charges	Name	Hotel	

Figure 2-21 0+ call with a denial reason of Srv Res.

The above figure illustrates a call in which a service restriction denial has been issued. The call is identified as a toll 0+ call and the calling and called numbers are displayed in the Clg and Cld fields, respectively. The cursor appears in the Spl field and a flashing calling card number is displayed in the Spl field. Note that the <> in the figure represent the flashing mode. The French equivalent of *Srv Res* would also be *Srv Res* and the Spanish would be *Ser Res*.

TOPS MP PASSWORD UPDATE ENHANCEMENT

Background

When the password option is enabled, the third softkey from the left on the Assigned Activities screen becomes defined and labeled as *Update Passwr*.

Whenever this key is pressed, a small window labeled *Password Update* appears under the Assigned Activities window.

TOPS MP Changes

Although the entry of the login id and password is not affected, the password update display has changed. The change involves making the password entry and the password confirmation prompts one continuous string and moving the password field to the end of the prompt instead of in the middle.

The other change that this feature makes is that the password mismatch, success and failure prompts remain on the screen until the next key is pressed. With the exception of the <START> key, the password message is cleared from the screen and the action associated with the key pressed is performed. In the case of the <START> key, there is a requirement to press it twice, the first time to clear the password message and the second to confirm entry into the call processing screen.

The following figures illustrate the screen changes introduced by this feature:

ASSIGNED ACTIVITIES SCREEN		TYPE: OPERATOR
<u>Services</u>	<u>Transfers</u>	
Toll and Assistance	0,1,2,3	
Directory Assistance		

PASSWORD UPDATE	
Enter new password and press Start	

Alt Display	Adjust Pos	Update Passwr	Withhld Calls	Reset Stats	Show Stats	Print Stats	Erase Stats

Figure 2-22 New password entry.

This figure illustrates the screen where a new password is entered. In French and Spanish, the prompts would be *Entrer nouv mpasse et appuyer sur Envoi* and *Nueva contrasena y oprimir <Inic>* respectively.

ASSIGNED ACTIVITIES SCREEN		TYPE: OPERATOR
<u>Services</u>	<u>Transfers</u>	
Toll and Assistance	0,1,2,3	
Directory Assistance		

PASSWORD UPDATE	
Reenter to confirm and press Start	

Alt Display	Adjust Pos	Update Passwr	Withhld Calls	Reset Stats	Show Stats	Print Stats	Erase Stats

Figure 2-23 Password confirmation prompt

This figure illustrates the screen where password confirmation is entered. In French and Spanish, the prompts would be *Retaper pr valider et appuyer sur Envoi* and *Confirmar contraseña y oprimir <Inie>* respectively.

ASSIGNED ACTIVITIES SCREEN		TYPE: OPERATOR
<u>Services</u>	<u>Transfers</u>	
Toll and Assistance	0,1,2,3	
Directory Assistance		

PASSWORD UPDATE	
Password entries did not match	

Alt Display	Adjust Pos	Update Passwr	Withhld Calls	Reset Stats	Show Stats	Print Stats	Erase Stats

Figure 2-24 Password mismatch prompt

This figure illustrates the screen where an alert message is displayed in the password entry and reentry did not match. In French and Spanish, the prompts would be *Les mots de passe ne correspondent pas* and *Contrasenas no corresponden* respectively.

ASSIGNED ACTIVITIES SCREEN		TYPE: OPERATOR	
<u>Services</u>		<u>Transfers</u>	
Toll and Assistance		0,1,2,3	
Directory Assistance			

PASSWORD UPDATE	
Password update successful	

Alt Display	Adjust Pos	Update Passwr	Withhld Calls	Reset Stats	Show Stats	Print Stats	Erase Stats

Figure 2-25 Successful password update prompt

This figure illustrates the screen where an a message is displayed when a password update has been successful. In French and Spanish, the prompts would be *Changement mot de passe réussi* and *Cambio de contraseña* respectively.

ASSIGNED ACTIVITIES SCREEN		TYPE: OPERATOR
<u>Services</u>	<u>Transfers</u>	
Toll and Assistance	0,1,2,3	
Directory Assistance		

PASSWORD UPDATE	
Password update failed	

Alt Display	Adjust Pos	Update Passwrd	Withhld Calls	Reset Stats	Show Stats	Print Stats	Erase Stats

Figure 2-26 Failed password update prompt

This figure illustrates the screen where an a message is displayed when a password update attempt has failed. In French and Spanish, the prompts would be *Changement mot de passe non réussi* and *Cambio de contraseña fallido* respectively.

MM - ASSISTANT REQUEST FUNCTIONS

TOPS MP changes

A fourth page has been added to the TOPS MP functions menu, and three new functions are now visible on this page. The diagram on the next page shows a TOPS MP terminal with the new fourth function page displayed. Although the diagram shows only English strings for the three new functions, a TOPS

MP datafilled for French or Spanish position language shows appropriate translations as follows:

Language	Function 57	Function 58	Function 59
English	General Assistance	Directed Assistance	Paged Assistance
French	Assistance Général	Assistance Spéciale	Assistance Recherche
Spanish	Supervisora General	Supervisora Directo	Supervisora Llamada

Table 2-60 TOPS MP Request Assistant Function Menu Translations

As with any MP function, an assistant request function can be invoked from a displayed or a hidden functions menu. The functions menu is displayed by pressing Fncts twice, and then once more for each page to be advanced. Any function can be invoked from any menu page by typing the function number followed by Start. If the function number is already known, the function can be invoked from a hidden menu. This is done by pressing Fncts once, and then typing the function number followed by Start.

A quicker and more convenient method of invoking any MP function has been to datafill that function onto one of the available hardkeys. Then any Fncts + <function #> + Start key sequence can be replaced by the single press of that hardkey. The TAMI menu that allows hardkey datafill has been enhanced to permit the datafill of any new assistant request function on any available hardkey. See the “EXPANDED HARDKEYS” section of this document for more information

All three assistant request functions make use of OGT datafill in the TPC to determine the OGT number for assistance. In the examples that follow, the OGT number for assistance is assumed to be 0, but all 0's can be replaced with the correct OGT number if it is not 0. If an OGT number for assistance is not datafilled, then all three assistant request functions are invalid. See the “ASSISTANCE OGT KEY ENHANCEMENT” section for more details.

The general assistance function is invalid if it is invoked from an assistant position; an assistant must use directed or paged assistance. The paged assistance function is invalid if it is invoked when a page is not active. Note that the term “assistant” throughout this document refers to either a service assistant (SA) or an in-charge (IC) position

		12:00	L1	L2
TOLL		FUNCTIONS		
Clg		57 General Assistance 58 Directed Assistance 59 Paged Assistance		
Cld				
Spl				
IC				
Misc				

General Assistance

The old method (which still works the same) of issuing a **general** request is:

— OGT + 0 + Start + Start

The new method, making use of a hidden functions key sequence, is:

— Fncts + 57 + Start

OR USING ONLY THE DIRECTED ASSISTANCE FUNCTION

— Fncts + 58 + Start + Start

A hard key datafilled to function 57 or 58 can further shorten the sequence to:

— <general assistance hardkey>

OR USING ONLY A DIRECTED ASSISTANCE HARDKEY

— <directed assistance hardkey> + Start

Directed Assistance

The old method (which still works the same) of issuing a **directed** request is:

— OGT + 0 + Start + <assistant #>¹ + Start

The new method, making use of a hidden functions key sequence, is:

— Fncts + 58 + Start + <assistant #>¹ + Start

A hardkey datafilled to function 58 can further shorten the sequence to:

— <directed assistance hardkey> + <assistant #>¹ + Start

Paged Assistance

The old method (which still works the same) of issuing a **paged** request is:

— OGT + 0 + Start + <assistant #>¹ + Start

The new method, making use of a hidden functions key sequence, is:

— Fncts + 59 + Start

OR USING ONLY THE DIRECTED ASSISTANCE FUNCTION

— Fncts + 58 + Start + <assistant #>² + Start

A hardkey datafilled to function 59 or 58 can further shorten the sequence to:

— <paged assistance hardkey>

OR USING ONLY A DIRECTED ASSISTANCE HARDKEY

— <directed assistance hardkey> + <assistant #>² + Start

TPC TAMI changes

The hardkey datafill screen on the TAMI now accommodates the three new functions which have been introduced:

- general assistance
- directed assistance
- paged assistance

¹The operator must manually enter the desired assistant's number from memory.

²The operator must manually enter the paging assistant's number from the "page" display.

Please refer to the Expanded Hardkeys portion of this feature for details on assigning these functions to hardkeys.

MM - EXPANDED HARDKEYS

Background

Hardkeys are keys that may be datafilled to invoke any of the functions that are listed in the TOPS MP function menu. An operator can access a function by keying FNCTS + <desired function number> + <START>. With a hardkey defined to perform the desired function, the operator only needs to press the appropriate hardkey. Hence, hardkey availability will reduce the amount of keying that an operator has to perform.

There are six default hardkeys that are located along the top of the call processing cluster. With this feature there are now 60 functions that can be assigned to hardkeys. Usually, the six most frequently used functions are assigned to hardkeys. The introduction of the customer configurable keyboard removed the restriction that hardkeys had to be located on the top line of the call processing cluster. This enhanced the usefulness of the hardkeys by allowing them to be located in areas of the keyboard that hadn't been used before. For example, the 2x7 array of keys between the QWERTY and the call processing cluster has, until now, been underutilized.

While the relocation capability of the customer configurable keyboard helped to increase the usefulness of the six original hardkeys, it also highlighted a limitation. Users expressed the desire to have more hardkeys because they have many other highly used functions that they had wished to assign but could not because of the limitation of only six hardkeys. This feature increases that limit from six to thirty-two.

Changes

Default Hardkeys

The TAMI interface for defining hardkeys has been redesigned. The TAMI hardkey interface screen is still accessed by typing 2 (TPC DATAFILL) from the TAMI main menu following by typing 1 (DEFINE POSITION SETTINGS) and then 3 (DEFINE HARDKEYS). In the following figure, the new version of the "Define Hardkeys" screen along with its default TPC hardkey definitions is shown.

NOTE: Changes will not take effect for a position until it is Bsy'd and RTS'd.

FUNCTION	FUNCTION
1. access loop 1	17. unassigned
2. cancel timing	18. unassigned
3. busy verify	19. unassigned
4. coin return	20. unassigned
5. rate step	21. unassigned
6. transfer ic	22. unassigned
7. unassigned	23. unassigned
8. unassigned	24. unassigned
9. unassigned	25. unassigned
10. unassigned	26. unassigned
11. unassigned	27. unassigned
12. unassigned	28. unassigned
13. unassigned	29. unassigned
14. unassigned	30. unassigned
15. unassigned	31. unassigned
16. unassigned.	32. unassigned

Figure 2-27 TAMI Default Hardkey Definitions.

User Datafilled Hardkeys

Some users have a datafill diskette for their TPCs. It contains many settings that they wish to use across different TPC software loads. After a new TPC software load is installed, they copy the old settings from the diskette. If the user has loaded their own set of hardkeys from a datafill diskette onto the TPC, the default settings listed in the screen in the previous figure will not be shown. Instead, the user supplied values will be seen. An example of a user defined hardkey datafill is shown in the following figure

NOTE: Changes will not take effect for a position until it is Bsy'd and RTS'd.

FUNCTION	FUNCTION
1. ring calling	17. unassigned
2. start stopwatch	18. unassigned
3. busy verify	19. unassigned
4. split/join called	20. unassigned
5. make busy	21. unassigned
6. transfer ic	22. unassigned
7. unassigned	23. unassigned
8. unassigned	24. unassigned
9. unassigned	25. unassigned
10. unassigned	26. unassigned
11. unassigned	27. unassigned
12. unassigned	28. unassigned
13. unassigned	29. unassigned
14. unassigned	30. unassigned
15. unassigned	31. unassigned
16. unassigned	32. unassigned

Figure 2-28 Example of a User-defined Hardkey Datafill.

Defining a New Hardkey

In order to create a new hardkey definition, the function name must first be found in the following list:

access loop 1	directed assistance	release calling
access loop 2	fixed duration	request cama
adjust pos	gen ama	requested number
alternate route	general assistance	retr by clg no.
auto collect	handoff to aabs	retr by serial no.
block/unblock clg	hold	ring called
busy verify	hotel	ring calling
cancel timing	make busy	sn routing
call details	memo	split/join called
called name	name	split/join calling
calling name	next db call	start stopwatch
charge adjust	no ama	start timing
clear db call	notify	store db call
clear stopwatch	over collect	time

Table 2-61 Hardkey Function Names

coin	overseas	time and charges
coin collect	overseas da	tone repeat
coin return	overseas inward	transfer/recall
db class	page assistance	transfer ic
delete db call	person call back	verify special
dial rate	rate step	withhold calls

Table 2-61 Hardkey Function Names

In order to illustrate the required steps for defining a hardkey, the process for adding coin and hotel hardkeys will be outlined. Although these two functions were previously available as hardkeys, they were rarely defined as hardkeys as they were usually available as softkeys. Now that both coin and hotel softkeys have been removed from all da and toll service screens, they may be more useful to add.

To define a hardkey:

1. The cursor should be moved to the number of the hardkey to be defined. (Note that for purposes of this example, hardkeys 7 and 8 are used in defining coin and hotel. They could, however, appear anywhere in the list of the thirty-two user-defined hardkeys.)
2. The function name should be typed in as it appears in the list of names shown in the Hardkeys Function Names table. If an incorrect entry is made, the terminal will beep, and the cursor will move back to the beginning of the entry field. The user can then type over the invalid data or press a cursor key to restore the original. Defining function keys 7 and 8 as coin and hotel respectively results in the following TAMI screen:

NOTE: Changes will not take effect for a position until it is Bsy'd and RTS'd.

FUNCTION	FUNCTION
1. access loop 1	17. unassigned
2. cancel timing	18. unassigned
3. busy verify	19. unassigned
4. coin return	20. unassigned
5. rate step	21. unassigned
6. transfer ic	22. unassigned
7. coin	23. unassigned
8. hotel	24. unassigned
9. unassigned	25. unassigned
10. unassigned	26. unassigned
11. unassigned	27. unassigned
12. unassigned	28. unassigned
13. unassigned	29. unassigned
14. unassigned	30. unassigned
15. unassigned	31. unassigned
16. unassigned	32. unassigned

Figure 2-29 Example of a User-defined Hardkey Definition of Coin and Hotel Keys.

3. Pressing PF3 will save these new hardkey definitions to the hard disk. It will also return the user to the DEFINE POSITION SETTINGS menu.
4. Now that hardkeys 7 and 8 have been defined, it is desirable to assign these hardkeys to actual physical keys since the default keyboard does not use them. In order to do this, the TPC's customer configurable keyboard capability must be used.
5. Finally, enter 4 to select DEFINE KEYBOARD.
6. Now as an example, the two new hardkeys, Coin and Hotel, are to be located on the bottom row of the 2x7 key array. Thus, the key numbers would be 123 and 124. Enter hardkey 7 and hardkey 8 as shown below:
 - a. 123. hardkey 7 hardkey 7 invalid
 - b. 124. hardkey 8 hardkey 8i invalid

In this example, it is assumed that the hardkey functionality is valid both for the unshifted and shifted states of the keys. The 'alt' state of the keys is not valid.

7. When finished, the PF3 key is pressed in order for the defined keyboard changes to be saved to the hard disk. Once this is complete, the MP positions need to be BSY'd and RTS'd in order for the changes to take affect.

It is important to note that any key number that has not been assigned a function will appear “unassigned” on the TAMI screen where the function definitions appear. Also, in order to remove a function from a key number, the key must either be assigned another function or be designated “unassigned.” The process for designating a key “unassigned” is the same as for assigning it a function. Remember that, like the function names, “unassigned” must be typed in lowercase.

MM - PREPAID COIN OVERTIME

TOP MP Changes

Prior to this feature, the non-ACTS screen had no way of indicating to the operator whether a call was pre- vs. post-paid. Now, the MP Non-ACTS Call Details window distinguishes between the two by either displaying “Overtime Type: PRE” or “Overtime Type: POST” upon call arrival. With an ACTS call, Pre-paid Coin Overtime identifies pre-pay and post-pay as PRE and POST respectively displayed immediately after the ACTS amount due.

The following figures illustrate the screen changes introduced by Pre-paid Coin Overtime:

CALL DETAILS		
Chg: \$XXX.XX	OC: XX	Nfy: XX
Min: XXX:XX	RS: XX	
Overtime Type: PRE		

Figure 2-30 MP Non-ACTS Call Details With Pre-pay. In French, *Overtime Type: PRE* would be *Mode Frais supp: Pré*. In Spanish, *Overtime Type: PRE* would be *Cat de Sobretpo: PreP*.

CALL DETAILS		
Chg: \$XXX.XX	OC: XX	Nfy: XX
Min: XXX:XX	RS: XX	
ACTS	Amt Due: XXX.XX PRE	

Figure 2-31 MP ACTS Call Details With Pre-pay. In French, *Amt Due: XXX.XX PRE* would be *A payer: XXX.XX Pré*. In Spanish, *Amt Due: XXX.XX PRE* would be *Cobrar: XXX.XX PreP*.

CALL DETAILS		
Chg: \$XXX.XX	OC: XX	Nfy: XX
Min: XXX:XX	RS: XX	
Overtime Type: POST		

Figure 2-32 MP Non-ACTS Call Details With Post-pay. In French, *Overtime Type: POST* would be *Mode Frais supp: Post*. In Spanish, *Overtime Type: POST* would be *Cat de Sobretpo: PosP*.

CALL DETAILS		
Chg: \$XXX.XX	OC: XX	Nfy: XX
Min: XXX:XX	RS: XX	
ACTS	Amt Due: XXX.XX POST	

Figure 2-33 MP ACTS Call Details With Post-pay. In French, *Amt Due: XXX.XX POST* would be *A payer: XXX.XX Post*. In Spanish, *Amt Due: XXX.XX POST* would be *Cobrar: XXX.XX PosP*.

MM - ASSISTANCE OGT KEY ENHANCEMENT

Assistance OGT Key Enhancement

Prior to this feature, the assistance OGT key description had to be exactly defined as the text string “assistance”. Now the assistance OGT key description can be any text string. It can be left as is, it can be abbreviated, or it can be changed completely (e.g. “HELP”). Additionally, in sites where TPCs are configured with all MPs as French or Spanish positions, this capability can be used to display a translated version of the assistance OGT key description.

Previously, OGT key definition was accomplished solely via the TAMI screen, “DEFINE OGT KEYS”. This included both definition of OGT key descriptions as well as definition of the assistance OGT key. Now all OGT key descriptions are still defined by that screen, but the assistance OGT key is defined in a new TAMI screen, “DEFINE ASSISTANCE OGT KEY” (see figure 62).

In the “DEFINE ASSISTANCE OGT KEY” screen, there is only one input field, where the cursor appears. Any OGT key can be defined as the assistance OGT key by simply entering the appropriate OGT key number in this field. If there is to be no assistance OGT key, the user simply enters a space to blank out the assistance OGT key.

The service description field of the “DEFINE ASSISTANCE OGT KEY” screen is for display only. When a new assistance OGT key is entered, this field automatically updates to display the description string that is currently assigned to the entered OGT key. To change the corresponding assistance OGT service description, access the “DEFINE OGT KEYS” screen. If a string is not defined for the entered OGT key, or if no assistance OGT key is entered, the service description field is blank.

DEFINE ASSISTANCE OGT KEY

NOTE 1: This datafill must match with table OGTMPKEY or TQOGTKEY at the MAP.

NOTE 2: Changes will not take effect for a position until it is Bsy'd and RTS'd.

To define the assistance OGT key, enter the desired OGT number.
To change the corresponding OGT service description, access the
"DEFINE OGT KEYS" screen. If no assistance OGT key is to be
defined, enter a space to blank out the OGT number.

Assistance OGT key: 0

Assistance OGT service description: assistance

Figure 2-34 TAMI "DEFINE ASSISTANCE OGT KEY" datafill screen

This new "DEFINE ASSISTANCE OGT KEY" screen, along with the previously existing "DEFINE OGT KEYS" screen, resides under a new TAMI submenu, "DEFINE OGT SETTINGS" (see figure 63). To reach this new submenu, access "TPC DATAFILL" from the TAMI main menu, then access "DEFINE POSITION SETTINGS", and next access "DEFINE OGT SETTINGS".

DEFINE OGT SETTINGS

1. DEFINE OGT KEYS

2. DEFINE ASSISTANCE OGT KEY

MAKE CHOICE:

Figure 2-35 TAMI “DEFINE OGT SETTINGS” submenu screen

As already noted, the “DEFINE OGT KEYS” screen still exists. This screen has not visibly changed except for the addition of a new message at the bottom of the display indicating the current assistance OGT key. If assistance is defined to the TPC’s default assistance OGT key, key number 0, this message would appear as follows: “Assistance is defined at OGT key 0“. If there is currently no assistance OGT key defined, this message would appear

AN0819mm.ab05**TOPS IV Display****The INSTITUTION_DISPLAY display****General**

This display appears in the call type field in the upper left hand portion of a TOPS IV screen. The actual display varies according to the datafill of the office parameter INSTITUTION_DISPLAY in table TOPSPARM. This office parameter is documented in detail in the DS section of this document.

Reason Why Displayed

This display informs the operator that an institution call is at position.

Location Of Display

This display begins at row 0, column 8 of a TOPS IV screen and can continue until row 0, column 13, depending on datafill.

Example

Figure 2-36 INSTITUTION_DISPLAY datafilled as 'INST'

1+ INST
619-555-3045
AC # 56982
ACS1

The Authorization Code Display

General

This display is used to prompt the operator that an authorization code is needed and to display the authorization number of a call. It appears on all institution calls and some hotel calls. This display varies according to the datafill of the two character vector ARAN_AUTH_DISPLAY in table TOPSPARM.

Reason Why Displayed

This display appears in order to prompt the operator that an authorization code is needed or to display an authorization code that was previously entered. The number following the display also flashes when an incorrect authorization number was entered.

Location Of Display

This display begins at row 12, column 0 of the TOPS IV screen and ends at row 12, column 4. It occupies the same position as the room number display. It may also be followed by an actual authorization code of up to 6 digits.

The 'AHOTEL' Display

General

This is a call type display that appears in the upper left hand portion of the TOPS IV screen. It is a fixed string: 'AHOTEL'.

Reason Why Displayed

This display appears when a HOTEL call marked for ARAN service appears on a TOPS IV screen.

Location Of Display

This display begins on row 0, column 8 of the TOPS IV screen and ends at row 0, column 13.

French Language Version

On French language position, the display appears the same.

Example

Figure 2-37 The 'AHOTEL' Display

0+ AHOTEL	
CLG # 619-555-3045	
RM #	ACS1

Changes to TOPS Key Functions

The KP ROOM Key Function

The KP ROOM key function is expanded by this feature to accept the input of authorization numbers for institution calls and hotel calls marked as requiring authorization number.

The keying sequence is the same for entering authorization numbers as it is for entering room numbers.

AN0820mm.ab06

Directories

No directories are affected by this activity.

Table of new/modified directories

Table 2-62 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET
RES/NONRES			

Not applicable.

Accessing directory:

Not applicable.

To access

Not applicable.

To return to CI

Not applicable.

Commands

This section is not applicable.

Table of New/modified commands

Table 2-63 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Not applicable.

Command name:

Not applicable.

Responses

Not applicable.

Notes

Not applicable.

Examples

Not applicable.

Alarms**Alarm name:**

Not applicable.

Activation of the CCDR D&A feature

The activation of the CCDR D&A feature/option is done via the SOC utility. Here is what needs to be typed from a MAP terminal to turn ON CCDR D&A:

- > SOC (to enter the SOC CI level),
- > ASSIGN RTU <password*> TO ABS00010,
- > ASSIGN STATE ON TO ABS00010.

*The password is unique for each office.

TOPS position screen displays**TOPS 04**

This section contains the TOPS 04 screen layouts that are associated with this feature.

In this section, what appears between brackets < ... > would be flashing on the position screen. On the TOPS 04 position, the card number digits are flashing when a calling card number is denied.

The new displays appear in the special number information field (row 6, column 32), and are up to 6 characters long including the underscore symbol. Here are the default values of the new displays for each denial reason:

Denial Indicator	Denial Reasons	English	French
CSDI (Calling card account number Service Denial Indicator)	3- Service Denial	SV_DEN	REFUSE
PSDI (Personal identification number Service Denial Indicator)	2- Threshold exceeded	THR_EX	MAX_AP
	3- Non-Payment	NO_PMT	NO_PMT
	4- Service restriction	SV_RES	SV_RES

Table 2-64 TOPS 04 default displays

The figure below illustrates a TOPS 04 screen for which the calling card number has been denied on a 0+ call because of "non-payment".

0+

STA SPL CLG

CLG # 514-653-1208

CLD # 416-457=1234

SPL # <819-783-2312-2345>

NO_PMT

ACS1

TOPS MP

Four new TOPS MP (Multi-Purpose) position screen displays are implemented on the TPC (TOPS Position Controller).

Refer to AN0796, TPC03 Human Machine Interface Changes, for a detailed description of the TPC design associated with this feature.

OPP

Refer to the OPP position vendor documentation for information on the OPP position displays, and to the OPP protocol document for a detailed description of the protocol.

Announcements

AABS announcements

Refer to feature AN0843, VSN CCDR D&A, for a detailed description of the VSN (Voice Service Node) design associated with this feature.

AN0834mm.ab02**Directories**

None

Table of new/modified directories**Table 2-65 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

N/A

To access

N/A

To return to CI N/A**Commands**

None

Table of New/modified commands**Table 2-66 New/Modified Command**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:

N/A

Command type

N/A

Command target

N/A

Command availability

N/A

Command description

N/A

Warning

N/A

Command syntax

N/A

Parameter definitions**Table 2-67** Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

N/A

Response

N/A

Explanation:

N/A

System action:

N/A

User action:

N/A

Notes

N/A

Examples

N/A

Alarms

Alarm name:

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

Operator Interfaces

Keying Action Changes

TOPS SP

The existing key function “KP IC” at the TOPS SP position is extended by this feature to accept 4 digit CICs. For this feature, the correct keying action for this key function is as follows:

KP IC Key Function

TOPS_FOUR_DIGIT_CIC_STATUS	CORRECT KEYING ACTION
THREEDIG	KP + 3 digit CIC + START
PERMISSIVE	KP + 3/4 digit CIC + START
FOURDIG	KP + 4 digit CIC + START

The office parameter TOPS_FOUR_DIGIT_CIC_STATUS in table OPSPARM indicates which CIC dialing stage the office is functioning in.

TOPS MP

The existing key function “IC” at the TOPS MP position is extended by this feature to accept 4 digit CICs. For this feature, the correct keying action for this key function is as follows:

IC Key Function

TOPS_FOUR_DIGIT_CIC_STATUS	CORRECT KEYING ACTION
THREEDIG	IC + 3 digit CIC + START
PERMISSIVE	IC + 3/4 digit CIC + START
FOURDIG	IC + 4 digit CIC + START

The office parameter TOPS_FOUR_DIGIT_CIC_STATUS in table TOPSPARM indicates which CIC dialing stage the office is functioning in.

OPP Terminal

The OPP keying action is also impacted by this feature. For OPP terminal changes, please refer to OPP terminal vendor documentation.

Screen Display Changes

TOPS SP Display

This feature affects the interfaces with TOPS operator. The carrier identification code (CIC) display for TOPS SP (TOP 4) positions now start at row 4, column 24 (4, 24) rather than start at row 4, column 25 (4, 25) prior to this feature.

Example

0-
CLG # 619-312-1234
CLD # 212-220-1234 IC 0123 ONEDIME
ACS1

Table 2-68 TOPS SP : 0- call with “KP IC + 4 digit CIC + START” & called number

TOPS MP Display

The display for TOPS MP positions will also be updated. Displays for TOPS MP please refer to “TPC36CH Release Notes”.

OPP Terminal

Display for positions that use OPP protocol should be in the documentation provided by different vendors.

AN0841mm.ab06**Directories**

DASIMDIR, PROGDIR, PMISTDIR

Table of new/modified directories**Table 2-69 New/modified directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
DASIMDIR	Changed		BOTH	RES
PMISTDIR	Changed		BOTH	RES
PROGDIR	Changed		BOTH	RES

Accessing directory: PROGDIR**To access**

Always accessed

To return to CI

Not applicable

Accessing directory: PMISTDIR**To access**

PMIST

To return to CI

QUIT

Accessing directory: DASIMDIR**To access**

DASIM

To return to CILEAVE

Commands

Table of New/modified commands

Table 2-70 Modified commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
DATA	Changed		DASIMDIR
SCENIBM	Changed		DASIMDIR
AUTOCOL	Changed		DASIMDIR
CCBILTYPE	Changed		DASIMDIR
DMSGLIST	Changed		PMISTDIR
DISPLAY	Changed		PMISTDIR
CALLDUMP	Changed		PROGDIR

Command name: DATA

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays all the settings used by the simulator. The new value for the auto collect option is displayed. Also, the simulator state (ON/OFF) is now displayed, as well as the MPX LOGON state

Warning

None

Command syntax

>Q DATA COMMAND TO DISPLAY SIMULATOR DATA

DATA parameter definitions

No parameters

Responses

No new responses

Response

Not applicable

Explanation:

System action:

User action:

Notes

None

Examples

On following page - the new/changed fields are in bold.

>DATA

THE SIMULATOR IS ON

SIMULATOR LINK IS SET TO: STUB

VENDOR IS SET TO: IBM

THE DESTID IS SET TO: 0

THE CC DESTID IS SET TO: 0

THE IBM LISTING STATUS IS SET TO: 0

THE AUTO COLLECT OPTION IS SET TO: **BILLSURCHARGE**

THE DELAY IS SET TO: 0

ANNOUNCEMENT DATA:

SCEN INDEX	SIM DESCRIPTION	ANN NUMBER
0	DA, AUTO QUOTE, EXT ARU	0
1	DA, AUTO QUOTE, EXT ARU, RECALL	0
2	DA, AQ, EXT ARU, RECALL DENIED	0
3	VOICE QUOTE, DA, RLS BY DAS	0
4	DA MEMORY CALL, VOICE QUOTE	0
5	DA OPERATOR, XFR, VOICE QUOTE	0
6	DA, MULTIPLE REQUEST	0
7	DA, AUTO-QUOTE, NO ANSWER	0
8	AUTO DA CALL COMPLETION	0
9	AUTO-INTERCEPT CALL TO ARU	0
10	INTERCEPT CUT THROUGH	0
11	AUTO-INTC, SEARCH TIMEOUT, VQ	0
12	AUTO-INTC, NO ARU, VOICE QUOTE	0
13	ONI-INTC, AUTO QUOTE	0
14	DA, AUTO QUOTE, INT ARU, RECALL	0
15	DA, AQ, INT ARU, 2 RCLS	0
16	ANI INT, INT ARU, CUT	0
17	ANI INT, INT ARU, CUT, RCL	0
18	VQUOTE, SERV CHANGE, DA AND TA	0
19	VQUOTE, POS RLS VIA RELAY	0

THE SCENARIO SELECTED IS: 9

THE REQUESTED DN IS: 2202011234

THE INTERCEPT ONI/ANIF DN IS: 0000000000

THE CC BILL TYPE IS SET TO: SENTPD

CALL COMPLETION AND ANNOUNCEMENT OPTION IS SET TO: NOCC

TRACING IS ACTIVATED

MPX LOGON IS FALSE

THE RELAY FROM POSITION VALUES ARE SET TO:

END OF SIMULATOR DATA

>

Command name: SCENIBM

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays, sets and selects the scenario the simulator uses for a DA call (in the IBM protocol). This command is enhanced by this feature to include support for the new CALL INITIATION message.

Warning

None

Command syntax

```

>Q SCENIBM
COMMAND TO MODIFY THE IBM SCENARIO FOLLOWED BY THE SIMULATOR
Parms: <SUB-COMMAND> {
    DISPALL,
    DISPLAY [<INDEX#> {0 TO 23}]
    SELECT  <INDEX#> {0 TO 23}],
    MODIFY_DESCRIPT <DESCRIPTION> STRING
    MODIFY_EVENT <EVENT#. {0 TO 19},
        <EVENT> {
            NIL
            ARUSELECT,
            REQARUSTATUS,
            ARUSTATUS,
            CALLINIT,
            POSSTATUS,
            POSBUSYIN,
            SUBSCRIBEDISCONNECT,
            TRANSFERABORT,
            POSRELEASE,
            TRANSFER,
            IMMEDTRANSFER,
            TRANSFERCANCEL,
            REQPOSSTATUS,
            CALLARRIVAL,
            REFERRAL,
            DELAYTRANSFER,
            NIL17,
            SYSIDRESPONSE,
            SYSIDREQ,
            SPEAK,
            SPEAKCOMPLETE,
            SPEAKREJECT,
            NEWREQ,
            NIL24,
            CCTRANSFER,
            CCARUSELECT,
            COMPLETECALL,
            CALLRELEASE,
            DETEXCEPTION,
            NIL30,
            AMAUPDATE,
            NIL32,
            NIL33,
            NIL34,
            RELAYFROMPOS}
        <TIME-VALUE> {1 TO 255}
        <TIME-UNITS> {TENMS,
            SECS,
            MINS,
            HRS,
            AEONS}
        [<BILLING APPENDAGE> {NO,
            YES}}}]

```

SCENIBM parameter definitions

Table 2-71 SCENIBM parameter definitions

PARAMETER	VALUE	DEFINITION
sub-command	display, dispall, select, modify_descript, modify_event	mandatory - specifies to display, select which scenario or modify the current scenario
index#	0 TO 23	identifies which scenario to select or display
event#	0 TO 19	identifies which event in the current scenario is to be modified
event	CALLINIT, etc.	identifies which message is to be sent or expected at this point in the call scenario
time-value	1 TO 255	together with time-units determines how much time to wait until the next event in the scenario
time-units	TENMS, SECS, MINS, HRS, AEONS	together with time-value determines how much time to wait until the next event in the simulator
billing appendage	YES, NO	determines whether additional information is included in the POS RELEASE message

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

There is one new default scenario added: 'NO ANNOUNCEMENT ADACC CALL'.

Examples

> SCENIBM MODIFY_EVENT 0 CALLINIT 10 SECS

>

Command name: AUTOCOL

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the auto collect option the simulator uses for a DA call (in the IBM protocol). This command is enhanced by this feature to include the new value for auto collect surcharge (BILLSURCHARGE).

Warning

None

Command syntax

```
>Q AUTOCOL
COMMAND TO SET THE AUTO COLLECT OPTION USED
Parms: <AUTOCOL-TYPE> {  UNSPEC,
                           NOBILL,
                           BILLALL,
                           BILLOC,
                           BILLTOLL,
                           BILLSURCHARGE}
```

AUTOCOL parameter definitions**Table 2-72 AUTOCOL parameter definitions**

PARAMETER	VALUE	DEFINITION
autocol-type	unspec, nobill, billall, billoc, billtoll, billsurcharge	mandatory - specifies which auto collect option is to be used.

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

>AUTOCOL BILLSURCHARGE

>

Command name: CCBILTYPE

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the Call Completion Billing type used by the simulator when requesting completion of a call. This command is enhanced by this feature to include support for the operator billing type in the IBM DA protocol.

Warning

None

Command syntax

```
>Q CCBILTYPE
COMMAND TO SET THE CC BILL TYPE USED
Parms: <CCBILL-TYPE> {  NONE,
                        CONTBIL,
                        SENTPD,
                        ALTBIL,
                        AUTOCOL,
                        OPERBIL }
```

CCBILTYPE parameter definitions

Table 2-73 CCBILTYPE parameter definitions

PARAMETER	VALUE	DEFINITION
ccbill-type	none, contbil, sentpd, altbil, autocol, operbil	mandatory - specifies which billing type is to be used in the call completion

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

> CCBILTYPE OPERBIL

>

Command name: DMSGLIST**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays messages. This command is enhanced by this feature to include formatting for all messaging changes introduced by this feature. Note that parameter FORMAT_PMIST_MPC_DA_MSG in table VROPT must be set to 'FULL' in order to enable this formatting.

Warning

None

Command syntax

Q DMSGLIST
DMSGLIST -- DISPLAYS THE LIST OF INTERCEPTED I/O MESSAGES
Parms: [<NUMBER OF MESSAGES> {1 TO 246}]

DMSGLIST parameter definitions

Table 2-74 DMSGLIST parameter definitions

PARAMETER	VALUE	DEFINITION
Number of messages	1 to 246	optional - specifies the number of messages to display

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

```

>DMSGLIST
    (the usual PMIST general header has been removed)

    MPC NUMBER      = 4
04    LINK NUMBER   = 4
0A    CONV NO      = 10
      DAS VENDOR    = IBM
01 55 02    SWITCH ID      = 1
          CALLID      = 597
20 34    POSITION ID      = 243
27    TRANSACTION CODE = CALL INITIATION
00 33    POS ID        = 51
16 69 12 11 11    CALLING DN      = 6196211111
70    CALL TYPE      = DA
      RECONNECT      = FALSE
      CALL ON HOLD    = FALSE
      CALL AT AUDIO   = FALSE
      IEC ID PRESENT  = TRUE
      EQUIPMENT TYPE  = DP
      DA CUT-THROUGH  = TRUE
30 54    IEC/NBEC ID    = 0345
70 21    TRUNK GROUP ID = 0712
01    FIRST LANGUAGE   = 1
02    SECOND LANGUAGE  = 2

```

Command name: DISPLAY

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays messages stored in a file. This command is enhanced by this feature to include formatting for all messaging changes introduced by this feature. Note that parameter FORMAT_PMIST_MPC_DA_MSG in table VROPT must be set to 'FULL' in order to enable this formatting.

Warning

None

Command syntax

Q DISPLAY
DISPLAY -- DISPLAYS THE CONTENTS OF A MESSAGE FILE
Parms: <FILE NAME> FILE name

DISPLAY parameter definitions

Table 2-75 DISPLAY parameter definitions

PARAMETER	VALUE	DEFINITION
file-name	string	mandatory - specifies the file containing the messages to display

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

```

>DMSGLIST
  (the usual PMIST general header has been removed)

04      MPC NUMBER      = 4
0A      LINK NUMBER     = 4
        CONV NO        = 10
        DAS VENDOR     = IBM
01 55 02 SWITCH ID      = 1
        CALLID         = 597
20 34   POSITION ID      = 243
27      TRANSACTION CODE = 39
00 33   POS ID         = 51
16 69 12 11 11 CALLING DN = 6196211111
70      CALL TYPE       = DA
        RECONNECT      = FALSE
        CALL ON HOLD   = FALSE
        CALL AT AUDIO  = FALSE
        IEC ID PRESENT = TRUE
        EQUIPMENT TYPE = DP
        DA CUT-THROUGH = TRUE
30 54   IEC/NBEC ID     = 0345
70 21   TRUNK GROUP ID  = 0712
01      FIRST LANGUAGE  = 1
02      SECOND LANGUAGE = 2

```

Command name: CALLDUMP

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays fully formatted billing records at the user's terminal. This command is enhanced by this feature to include the strings for the autocollect options in the listing services record.

Warning

None

Command syntax

Summary:

CALLDUMP is a tool which allows the user to display fully formatted billing records at the users terminal. To view records the user simply makes a billable call(s), goes onhook, and enters "CALLDUMP".

Parms: [<Stream name (or "PREVIOUS")> STRING]
 [<Format> { HEX,
 FULL}]

CALLDUMP parameter definitions

Table 2-76 CALLDUMP parameter definitions

PARAMETER	VALUE	DEFINITION
sub-command	STRING	Name of DIRP stream from which records are obtained. Default is AMA.
format	HEX, FULL	How to display it (unformatted or formatted)

Responses

No new responses are provided.

Response

Not applicable

Explanation:

None.

System action:

None

User action:

None

Notes

None

Examples

> CALLDUMP FULL

>CALLDUMP FULL

*

HEX ID:	AA	
STRUCTURE CODE:	40752C	
CALL CODE:	192C	ORIG, CALL COMPLETION
...		
MODULE CODE:	051C	CALL COMPLETION SERV
OVERSEAS IND:	0C	NPA DIALED
TERM NPA:	00201C	
TERM NUMBER:	2209876C	
COMPLETION IND:	001C	ANSWERED
RATE IND:		
OSS CALL COMPLETION CONDITIONS:		
ASSISTANCE TYPE	3	AUTOMATED
SATELLITE AVOIDANCE	1	NOT REQUESTED
NPA POINT	1	YES
DIALABLE POINT	1	YES
SUBSEQUENT TREATMENT	7	DA REQUEST
ENTERPRISE CALLING	7	AUTO COLLECT SURCHARGE ONLY
RESERVED	0C	
MODULE CODE:	000C	FINAL MODULE

>

Alarms

Not applicable

AN0880mm.ab08**Directories**

DASIMDIR, PMISTDIR

Table of new/modified directories**Table 2-77 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
DASIMDIR	Changed		BOTH	RES
PMISTDIR	Changed		BOTH	NON-RES
QCALLDIR	Changed		BOTH	RES

Accessing directory: DASIMDIR**To access**

DASIM

To return to CI

LEAVE

Accessing directory: PMISTDIR**To access**

PMIST

To return to CI

QUIT

Accessing directory: QCALLDIR**To access**

QCALL

To return to CI

QUIT

Commands

ADASCONT, AUTOLANG, TQCLDNAM, MONITOR, RESOURCE, Q,
DATA, DMSGLIST, DISPLAY, SHOW, CLDDIG, CLDNAM

Table of New/modified commands**Table 2-78 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
ADASCONT	New		DASIMDIR
AUTOLANG	New		DASIMDIR
TQCLDNAM	New		DASIMDIR
MONITOR	New		DASIMDIR
RESOURCE	New		DASIMDIR
POOLID / CCPOOLID	Changed		DASIMDIR
POSRQN	Changed		DASIMDIR
DATA	Changed		DASIMDIR
DMSGLIST	Changed		PMISTDIR
DISPLAY	Changed		PMISTDIR
SHOW	Changed		QCALLDIR
CLDDIG	Changed		QCALLDIR
CLDNAM	New		QCALLDIR

Command name: ADASCONT

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the ADAS+ Continue indicator.

Warning

None

Command syntax

>q adascont

COMMAND TO SET THE ADAS+ CONTINUE BIT

Parms: <BOOLEAN> {Y/N}

Parameter definitions

Table 2-79 ADASCONT Parameter Definitions

PARAMETER	VALUE	DEFINITION
BOOLEAN	Y/N	Mandatory - Sets the ADAS+ Continue indicator.

Responses

No responses added.

Notes

Use the DATA command to check the result.

Examples

>ADASCONT Y

>ADASCONT N

Command name: AUTOLANG

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the AUTOLANG.

Warning

None

Command syntax

>q autolang

COMMAND TO SET THE AUTOMATED LANGUAGE

Parms: <AUTO LANG> {0 to 14}

Parameter definitions

Table 2-80 AUTOLANG Parameter Definitions

PARAMETER	VALUE	DEFINITION
AUTO LANG	0 to 14	Mandatory - Sets the Automated Language

Responses

No responses added.

Notes

The Auto Lang index is datafilled in table TOPSLANG. Use the DATA command to check the result.

Example

>AUTOLANG 5

Command name: TQCLDNAM**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the TQCLDNAM.

Warning

None

Command syntax

>q tqcldnam
COMMAND TO SET THE CALLED LOCATION
Parms: <AREA INDEX> {0 to 126}

Parameter definitions

Table 2-81 TQCLDNAM Parameter Definitions

PARAMETER	VALUE	DEFINITION
AREA INDEX	0 to 126	Mandatory - Sets the Called Location

Responses

No responses added.

Notes

The index value is datafilled in table TQCLDNAM. Use the DATA command to check the result.

Example

>TQCLDNAM 17

Command name: MONITOR

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the monitoring status.

Warning

None

Command syntax

>q monitor

COMMAND TO SET THE MONITOR FIELD

Parms: <MON PARM> {NONE, PLAYBACK, OSDIALOG}

Parameter definitions

Table 2-82 MONITOR Command Definitions

PARAMETER	VALUE	DEFINITION
MON PARM	NONE, PLAYBACK, OSDIALOG	Mandatory - Sets the monitoring field to NONE (no monitoring), PLAYBACK (playback only) or OSDIALOG (through the operator - subscriber dialog)

Responses

No responses added.

Notes

Use the DATA command to check the result.

Examples

>MONITOR PLAYBACK

>MONITOR OSDIALOG

>MONITOR NONE

Command name: RESOURCE

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the resource to be released.

Warning

None

Command syntax

>q resource

COMMAND TO SET THE RESOURCE TO BE RELEASED

Parms: <RESOURCE> {CALL, ADASARU}

Parameter definitions**Table 2-83 RESOURCE Parameter Definitions**

PARAMETER	VALUE	DEFINITION
RESOURCE	CALL, ADASARU	Mandatory - sets which resource to be requested to release.

Responses

No added responses.

Notes

Use the DATA command to check the result.

Examples

>RESOURCE CALL

>RESOURCE ADASARU

Command name: POOLID and CCPOOLID**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

These commands respectively set the poolid and ccpoolid.

Warning

None

Command syntax

```
>POOLID 'number'  
>CCPOOLID 'number'
```

Parameter definitions

Table 2-84 POOLID and CCPOOLID Parameter Definitions

PARAMETER	VALUE	DEFINITION
number	0 - 100	mandatory - poolid or ccpoolid number

Responses

No new responses are provided.

Notes

POOLID and CCPOOLID ranges have been expanded.

Examples

```
>poolid 57  
POOLID IS SET TO 57
```

```
>ccpoolid 83  
CC POOLID IS SET TO 83
```

Command name: POSRSN**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command sets the detail field of the Position Request message.

Warning

None

Command syntax

>POSRSN <REASON-NAME>

Parameter definitions

Table 2-85 POSRSN Parameter Definitions

PARAMETER	VALUE	DEFINITION
REASON-NAME	SPLIT, PRIORITY, MISC, SUBSCRIBER, ADAS	mandatory - reason for requesting a position

Responses

No new responses are provided.

Notes

Also verify using the DATA command.

Examples

```
>POSRSN split
POS REQUEST REASON IS SET TO: SPLIT
>POSRSN adas
POS REQUEST REASON IS SET TO: ADAS
```

Command name: DATA**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

The command displays all of the DASIM parameters and their current values. It has been updated to include the new commands added by this feature.

Warning

None

Command syntax

>q data

COMMAND TO DISPLAY SIMULATOR DATA

Parameter definitions

Table 2-86 DATA Parameter Definitions

PARAMETER	VALUE	DEFINITION
None		

Responses

No new responses are provided.

Notes

None

Example

```

>DATA
THE SIMULATOR IS ON
SIMULATOR LINK IS SET TO: FAIL
VENDOR IS SET TO: CCI
THE LANGUAGE IS SET TO: DEFAULT
THE POS REQUEST REASON IS SET TO: ADAS
THE LOGIN LOGOUT DETAILS IS SET TO: SUCCESS
THE POOLID IS SET TO: 0
THE CC POOLID IS SET TO: 0
LISTING STATUS FIELDS:
LISTING STATUS: 15-NIL
SUBSTATUS1:    15-NIL
SUBSTATUS2:    15-NIL
SUBSTATUS3:    15-NIL
SUBSTATUS4:    15-NIL
SUBSTATUS5:    15-NIL
SUBSTATUS6:    15-NIL
SUBSTATUS7:    5-LISTING IS MARKED AUTO COLLECT SURCHARGE ONLY
SCEN INDEX     SIM DESCRIPTION                      ANN NUMBER
ANNOUNCEMENT DATA:

0      AUTO QUOTE DA CALL                          0
1      AUTO QUOTE AUTO-INTERCEPT CALL            0
2      AUTO QUOTE ONI-INTERCEPT CALL              0
3      AUTO QUOTE MULTIPLE REQ DA CALL              0
4      AUTO QUOTE WITH RECALL DA CALL               0
5      VOICE QUOTE MEMORY CALL                      0
6      VOICE QUOTE DA CALL                          0
7      VOICE QUOTE AUTO-INTERCEPT CALL            0
8      VOICE QUOTE AUTO-INTER, NO ARU               0
9      AUTO DA CALL COMPLETION                      0
10     AUTO INT CALL COMPLETION; NO ANN             0
11     AUTO INT CALL COMPLETION; ANN                0
12     SERVICE REQUESTS, TA, DA                    0

THE SCENARIO SELECTED IS: 9
THE REQUESTED DN IS: 2202011234
THE INTERCEPT ONI/ANIF DN IS: 0000000000
THE CC BILL TYPE IS SET TO: SENTPD
CALL COMPLETION AND ANNOUNCEMENT OPTION IS SET TO: NOCC
ADASCONT IS SET TO: Y
AUTOLANG IS SET TO: 5
TQCLDNAM IS SET TO: 17
MONITOR IS SET TO: PLAYBACK
RESOURCE IS SET TO: ADASPLUS_ARU
TRACING IS ACTIVATED
THE SERVICE REQUEST VALUES ARE SET TO:
END OF SIMULATOR DATA
>

```

Command name: DMSGLIST**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays messages. It is enhanced by this feature to include formatting for all new message updates. Note that parameter FORMAT_PMIST_MPC_DA_MSG in table VROPT must be set to 'FULL' in order to obtain this formatting.

Warning

None

Command syntax

>q dmsglist

DMSGLIST -- DISPLAYS THE LIST OF INTERCEPTED I/O MESSAGES

Parms: [<NUMBER OF MESSAGES> {1 TO 246}]

Parameter definitions**Table 2-87 DMSGLIST Parameter Definitions**

PARAMETER	VALUE	DEFINITION
Number of messages	1 to 246	optional - specifies the number of messages to display

Responses

No new responses are provided.

Notes

None

Examples

None

Command name: DISPLAY

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This command displays messages stored in a file. It is enhanced by this feature to include formatting for all message updates. Note that parameter FORMAT_PMIST_MPC_DA_MSG in table VROPT must be set to 'FULL' in order to obtain this formatting.

Warning

None

Command syntax

>q display

DISPLAY -- DISPLAYS THE CONTENTS OF A MESSAGE FILE

Parms: <FILE NAME> FILE name

Parameter definitions

Table 2-88 DISPLAY Parameter Definitions

PARAMETER	VALUE	DEFINITION
file-name	string	mandatory- specifies the file containing the messages to display

Responses

No new responses are provided.

Notes

None

Examples

None

Command name: CLDDIG

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Command to set the called number for refinement.

Warning

None

Command syntax with example datafill

>q CLDDIG

QUERY OR UPDATE THE CALLED NUMBER VARIABLE

IF A NUMBER IS GIVEN, IT MUST BE ENCLOSED IN SINGLE QUOTES

IF THE DATA IS NOT KNOWN FOR THIS PARTICULAR CALL,
ENTER 'UNKNOWN_CLDCRIT'.

ENTER THE CALLED DIGITS THAT WOULD REMAIN AFTER THE CALL,
HAS GONE THROUGH TRANSLATIONS

LEGAL PARAMETERS ARE 1 TO 18 DIGITS OR UNKNOWN_CLDCRIT
(EG. CLDDIG, CLDDIG '9917243', CLDDIG UNKNOWN_CLDCRIT)

Parms: [<CALLED NUMBER> STRING]

Parameter definitions

Table 2-89 CLDDIG Parameter Definitions

PARAMETER	VALUE	DEFINITION
CALLED NUMBER	digit string	Mandatory - Used for CLD refinements by searching on the called digits.

Notes

The functionality of this command has not changed any. Only the name of the command has been clarified from CLD to CLDDIG to distinguish it from CLDNAM, the name of the called location.

Command name: CLDNAM

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Command to set the called location as defined in table TQCLDNAM.

Warning

None

Command syntax with example datafill

>q CLDNAM

QUERY OR UPDATE THE CALLED LOCATION VARIABLE

ENTER THE CALLED LOCATION AS FOUND IN TABLE TQCLDNAM

(EG. CLDNAM, CLDNAM UNKNOWN_CLDCRIT)

Parms: [<CALLED LOCATION> STRING]

Legal parameters are: {UNKNOWN_CLDCRIT,WHITE_HOUSE}

Parameter definitions

Table 2-90 CLDNAM Parameter Definitions

PARAMETER	VALUE	DEFINITION
CALLED LOCATION	string	Mandatory - Used for CLD refinements instead of searching on the called digits.

Responses

THE VALUE HAS BEEN ASSIGNED: CLDNAM = WHITE_HOUSE

Examples

```
>CLDNAM UNKNOWN_CLDCRIT
THE VALUE HAS BEEN ASSIGNED: CLDNAM = UNKNOWN_CLDCRIT
>CLDNAM
CLDNAM = UNKNOWN_CLDCRIT
```

Command name: SHOW

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Displays assigned information

Warning

None

Command syntax

```
>q show
DISPLAY THE CURRENT QCALL DATA
(EG. SHOW)
```


Parameter definitions

Table 2-91 SHOW Parameter Definitions

PARAMETER	VALUE	DEFINITION
None	N/A	N/A

Responses

The current values of the QCALL variables are:

```

AUTO      = ADAS
CAR        = Unassigned
CLAS      = Unassigned
CLDDIG    = Unassigned
CLDNAM    = WHITE_HOUSE
CO         = 411
CT4Q      = Unassigned
EXPLAIN   = ON
LANG      = Unassigned
LASTCT4Q  = Unassigned
ORDER     = PREOPR
ORIGCLG   = Unassigned
ORIGTRNK  = Unassigned
PFXT      = Unassigned
REST      = Unassigned
TIME      = Unassigned
USE       = ACTIVE

```

Notes

None

Alarms

Not Applicable

Operator Screen Updates

TOPS-MP

The ADAS cassette icon will be displayed on the MP screen for ADAS+ served calls. This indicates to the operator that ADAS/ADAS+ will be providing a playback of the recorded information. This is dependant on the parameter, ADAS_CASSETTE_ICON in table TOPSPARM being set to Y.

If monitoring has been setup for ADAS+, the monitoring icon will be displayed. This is dependent upon the office parameter, TOPS_DISPLAY_MON, in table OFCVAR being set to Y.

Note that the cassette icon is shared by both ADAS/ADAS+ and branding; however, ADAS/ADAS+ takes precedence.

OPP Compliant Position

The OPP protocol will indicate whether or not ADAS/ADAS+ is involved with the call upon call arrival. It will also indicate whether or not monitoring has been setup. It is up to the position vendor as to how this information is displayed.

AN0882mm.ab01**Directories****Table of new/modified directories****Table 2-92 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

N/A

Accessing directory:

N/A

To access**To return to CI****Commands**

TRAVER

Table of New/modified commands**Table 2-93 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	Changed		

Command name:**Command type**

CI

Command target**Command availability**

DMS 100/200/250/300

Command description

CI command TRAVER is modified to except “CDN”, “CIC”, and CIC digits. These a parameters are necessary to set TV_CCB.CHB.LEAS_CALL to TRUE when the CIC entered equals office parameter LEAS_SS7_CIC. From this point on, the call will utilized LEAS on SS7 translations.

Warning**Command syntax****Parameter definitions****Table 2-94 Parameter Definitions**

PARAMETER	VALUE	DEFINITION
MFST_CDN	ST digit or “CDN”	
BILLST_CIC	ST digit or “CIC”	
CIC_DIGITS	Four digit number	Range 0000 to 9999

MFST_CDN

Valid Values: ST, ST2P, ST3P, CDN

BILLST_CIC

Valid Values: ST, ST2P, ST3P, CIC.

CIC_DIGITS

Valid Values: 0000 to 9999

Responses**Explanation:****System action:****User action:****Notes****Examples**

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN1027mm.aa06**Directories**

N/A

Commands**Command name:** ADD, CHANGE for table TOPSTOPT**Command type**

Non-menu

Command target

NT40, SuperNode

Command availability

RES

Command description

Unchanged

Warning

N/A

Command syntax

Unchanged

Parameter definitions

Unchanged

Responses

Response

The following new error messages may be generated when attempting to add data to table TOPSTOPT:

ADASERV	ADASANS	Trunk Types (Table TRKGRP)	Error
NONE	IMMEDIATE	All	1
NONE	DELAYED	All	1
ADAS	NA	Intertoll and TOPS ONI	2
ADAS	NA	All except Intertoll and TOPS ONI	3
ADAS	DELAYED	All except Intertoll and TOPS ONI	4
ADASPLUS	IMMEDIATE	All	1
ADASPLUS	DELAYED	All	1

Error	Error Message
1	ADASANS MUST BE NA
2	ADASANS MUST BE EITHER IMMEDIATE OR DELAYED
3	ADASANS MUST BE IMMEDIATE
4	DELAYED ANSWER NOT SUPPORTED FOR THIS TRUNK TYPE

Explanation:

The user has entered invalid data. The error message describes the problem.

System action:

The addition or change of the tuple is not allowed.

User action:

The user must edit the data being entered to make it acceptable.

Alarms

N/A

AN1028mm.aa03

Introduction

This feature provides a tool for monitoring the Automated Directory Assistance Service (ADAS). ADAS call information including subscriber interaction and speech processing data is collected and displayed to the user in several dialog windows. This data can also be displayed using bar graphs and pie charts.

The Service Monitor is one of the selections in the toolset on the Operation, Administration, and Maintenance (OAM) Workstation.

Environment

This feature runs on the OAM Workstation position. The workstation is an HP 9000 series running UN*X and UN*X Application Environment (UAE) base software. The workstation communicates with Application Processing Units (APUs) via ethernet, so the LAN connection must be available.

Accessing the Feature

The Service Monitor is accessed from the ADAS Tools toolset on the OAM Workstation. Choosing the Service Monitor menu item pops up the Main Dialog Window. Although selecting the Service Monitor menu item brings up the main window, no data will be collected until the user starts it by selecting Start menu item from the Options menu, detailed below.

For details on the specific data items collected refer to the FN portion of this document.

Figure 2-38 ADAS Service Monitor Main Dialog

✓ ADAS Service Monitor				<i>Graph Selection</i>		<i>Options</i>	
Time Tool Started: OFF							
	calls	%		min	max	avg	
Successful			Subscriber Interaction Time (sec)				
Unsuccessful			Queue for Operator Time (sec)				
ADAS Deflected			Playback Time (sec)				
Abandoned			Subscriber Hold Time (sec)				
Subscriber Interaction				Speech Processing			

ADAS Service Monitor Data Dialogs

The Main Dialog Window has four main divisions, detailed below.

ADAS Call Disposition

The total number of successful, unsuccessful, deflected, and abandoned ADAS calls are displayed to the user in the Main Dialog Box. The percentage of each call type compared to the total number of ADAS calls is also displayed.

Figure 2-39 ADAS Call Disposition Data

	calls	%
Successful		
Unsuccessful		
ADAS Deflected		
Abandoned		

Call Phase Times

The minimum, maximum, and average length of time a call spends in each call phase is displayed in seconds. These times are also displayed in the Main Dialog Window with the Call Information.

Figure 2-40 Call Phase Times Data

	min	max	avg
Subscriber Interaction Time (sec)			
Queue for Operator Time (sec)			
Playback Time (sec)			
Subscriber Hold Time (sec)			

Speech Processing

The initial subscriber speech time, the actual recording length, and all the time savings that occur during speech processing are displayed in milliseconds for the first, second, and total recordings. When configured for combined prompts the speech processing times are displayed as the first recording numbers. To access this data press the Speech Processing button on the Main Dialog Window. The Speech Processing Window will appear.

Figure 2-41 Speech Processing Data

Speech Processing									
	FIRST			SECOND			TOTAL		
	min	max	avg	min	max	avg	min	max	avg
Subscriber Speech Time (msec)									
Actual Recording Length (msec)									
Pre-speech Savings (msec)									
Compression Savings (msec)									
Silence Removal Savings (msec)									
Frame Redundancy Savings (msec)									
Total Time Savings (msec)									

Done ◊Return

Subscriber Interaction

All the subscriber interaction data collected is displayed in this dialog. To access the data press the Subscriber Interaction button on the Main Dialog Window. The Subscriber Interaction Window will appear.

Figure 2-42 Subscriber Interaction

Subscriber Interaction			
CALL DETAILS			
	first	second	other
Invalid DTMF Digit			
Spoke Too Soon Error			
Spoke Too Long Error			
No Speech Detected			
Prompt Talkover			
UNSUCCESSFUL ADAS CALLS			
		total	
Set Noise Floor Failures			
Hook Flashes			
DTMF Zeros			
Too Many DTMF Errors			
Too Many Record Errors			
SUBSCRIBER ABANDONS			
		total	
Subscriber Interaction Phase			
Queue for Operator Phase			
Playback Phase			
		Done Return	

ADAS Service Monitor Menus

ADAS Service Monitor Menu

The ADAS Service Monitor menu contains only Close and Help.

1. Close - This menu item closes the main dialog box and stops data collection.
2. Help - The help command supplies the user with general help about the entire monitor tool.

Graph Selection Menu

The Graph Selection menu is a cascade menu containing three sets of available graphs, Call Information, Speech Processing, and Subscriber Interaction.

1. Call Information - The charts available in this set represent call information data. See ADAS Service Monitor Graphs below for details.
2. Speech Processing - The charts and graphs off of this cascade menu represent the speech processing data. See ADAS Service Monitor Graphs below for details.
3. Subscriber Interaction - The charts and graphs off of this cascade menu herepresent speech processing data. See ADAS Service Monitor Graphs below for details.

Options Menu

1. Start - The start command will start collecting data from all APUs configured and running ADAS and display this time at the top left hand portion of the tool.
2. Stop - The stop command stops data collection. The totals will not be reset until the Clear menu item is selected.
3. Clear- The clear command resets all the data back to 0.

Help Menus

There are Help menu items available for every data field to give more information about the data being collected.

ADAS Service Monitor Graphs

Call Information Charts

1. ADAS Call Disposition Pie Chart - Pie chart which depicts the total number of ADAS calls divided into the number of successful, unsuccessful, deflected, and abandoned calls. Please refer to “Figure 2-43 Pie Chart Example” on page 222.
2. Call Phase Analysis Pie Chart - Pie chart which represents the average length of time for an ADAS call divided into its three main phases, subscriber interaction, in queue, and playback to an operator. Please refer to “Figure 2-43 Pie Chart Example” on page 222.
3. Mid Hold Time Bar Graph - This graph shows at 15 minute intervals, the total average length of time the subscriber waits while in queue for an operator and while playback of the the locality and listing to the operator. Please refer to “Figure 2-44 Mid Call Hold Time Bar Graph” on page 223.

Speech Processing Charts

1. Speech Processing Analysis Pie Chart - Pie chart which depicts the total subscriber speech time divided into the actual record length and the total

time savings when applying the configured speech processing methods. Please refer to “Figure 2-43 Pie Chart Example” on page 222.

2. Speech Processing Savings Pie Chart - Pie chart depicting the total savings by applying speech processing methods, divided into pre-speech elimination, speech compression, silence removal, and frame redundancy savings. Please refer to “Figure 2-43 Pie Chart Example” on page 222.

Subscriber Interaction Charts

1. Unsuccessful Call Analysis Pie Chart - Pie chart that represents the total number of unsuccessful calls divided into hook flashes, DTMF 0s, too many DTMF errors, too many record errors, and set noise floor failures when not configured to continue. Please refer to “Figure 2-43 Pie Chart Example” on page 222.
2. Abandon Call Analysis Pie Chart - Pie chart which represents the total number of abandoned ADAS calls divided into subscriber interaction, in queue, and playback phases. Please refer to “Figure 2-43 Pie Chart Example” on page 222.
3. Call Abandonment Times Histogram - Histogram which divides the ADAS calls into 1 second intervals and shows the number of subscribers who abandoned ADAS at each interval. Please refer to “Figure 2-45 Call Abandonment Times Histogram” on page 223.

Figure 2-43 Pie Chart Example

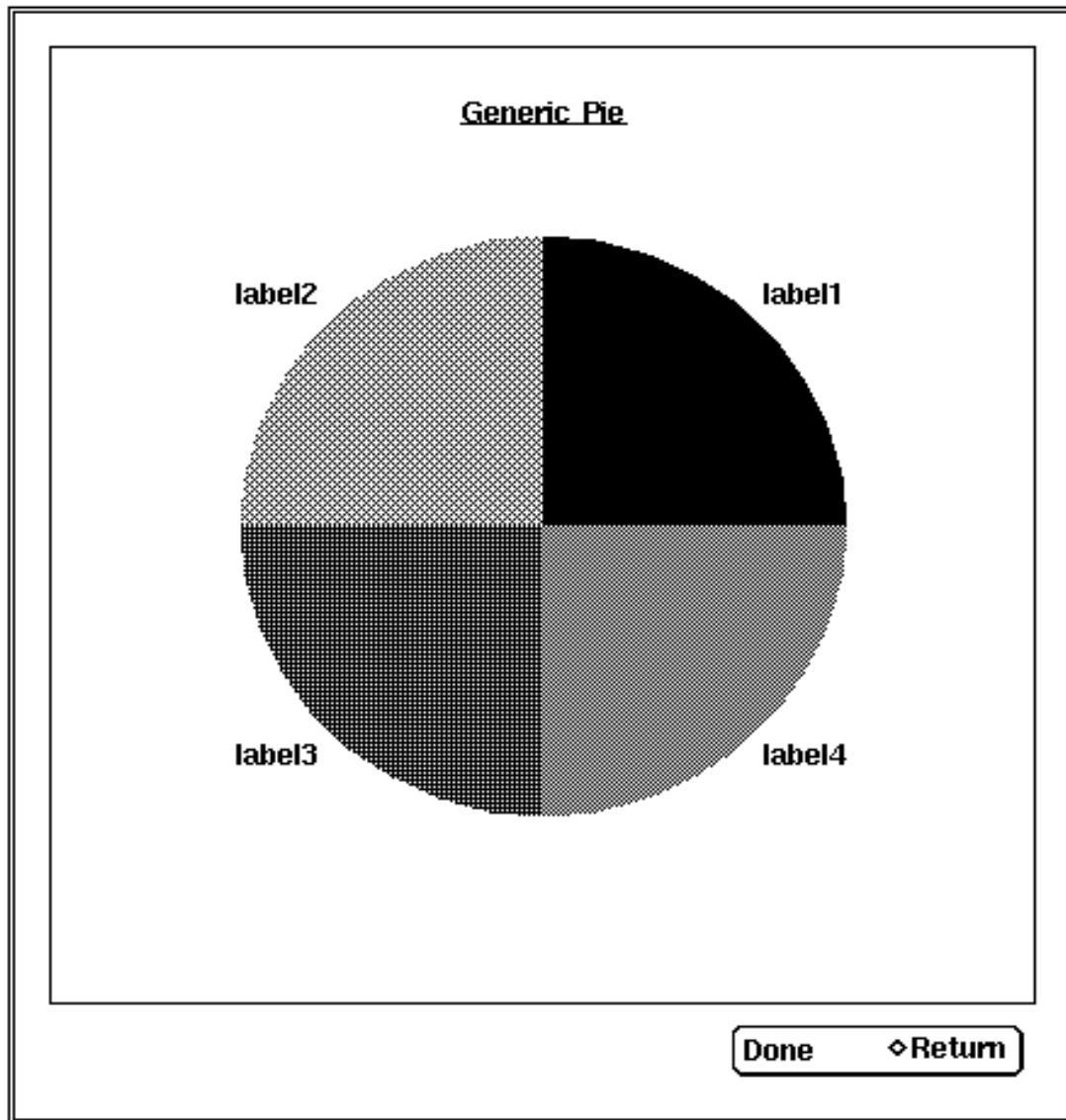


Figure 2-44 Mid Call Hold Time Bar Graph

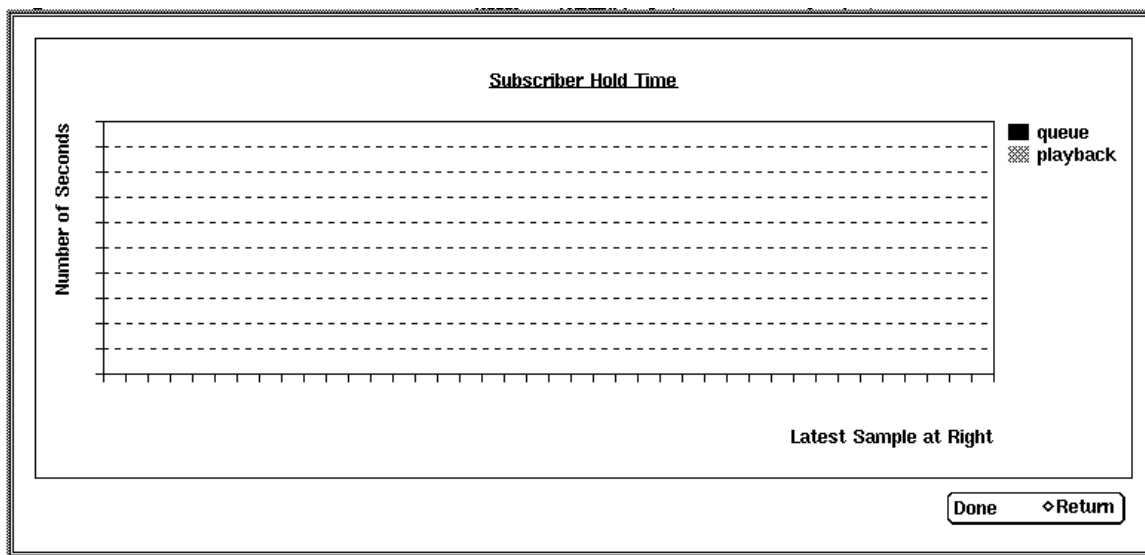
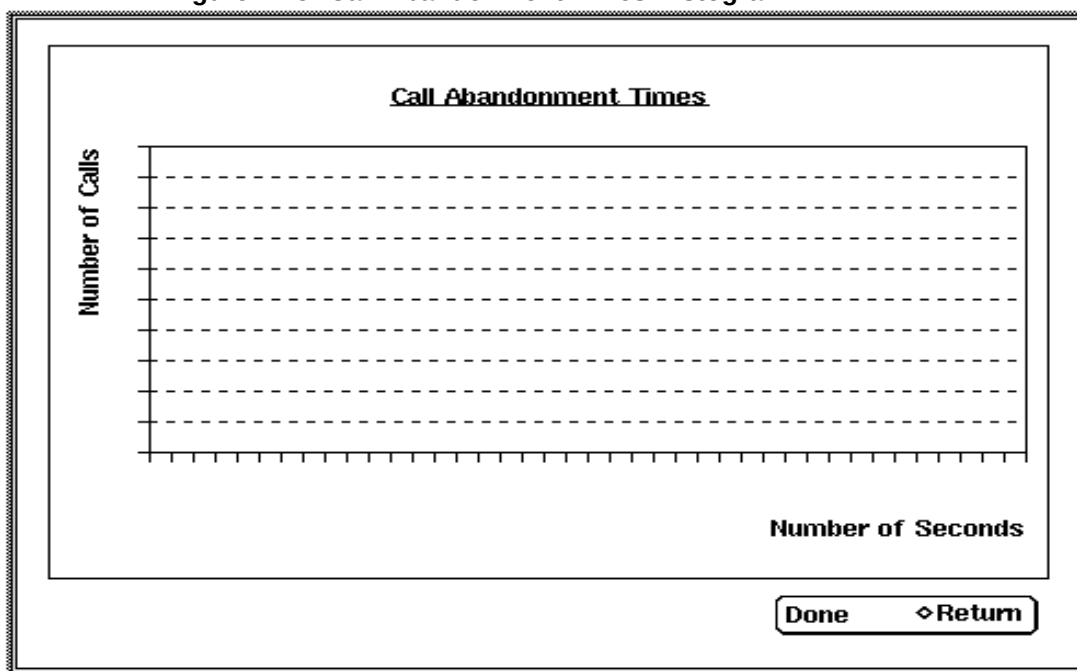


Figure 2-45 Call Abandonment Times Histogram



BRLMUA01

ADCPA01

AR0358mm.aa17**Directories**

The commands in the PATCHDIR directory have been changed to output information specific for DCH Patching. No command has changed format other than being able to perform XPM patching commands on DCH devices (CHECK, APPLY, REMOVE, etc.)

Table of new/modified directories**Table 2-95New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PATCHDIR	CHANGED			
DCHLTCDIR	CHANGED			

Accessing directory: PATCHDIR

No change from the existing patcher system has been made for accessing the patcher commands

To access

PATCHER

To return to CI

QUIT

Accessing directory: DCHLTCDIR

No change from the existing MAP commands for DCH(s) has been made for this feature

To access

MAPCI;MTC:PM:POST <XPM> <UNIT>;DCH;

To return to CI

QUIT MAPCI

Commands

The following PATCHER commands have changed only in the output of error messages and responses. The input format for the XPM Patching commands have been changed only to allow the command to interpret 'DCH' s as a type of patchable XPM device.

No new commands have been added to the XPM Patching system for DCH patching.

Table of New/modified commands

Table 2-96New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
APPLY	CHANGED		PATCHDIR
REMOVE	CHANGED		PATCHDIR
CHECK	CHANGED		PATCHDIR
INFORM LIST	CHANGED		PATCHDIR
INFORM PM	CHANGED		PATCHDIR
INFORM PMALL	CHANGED		PATCHDIR
INFORM SUMMARY	CHANGED		PATCHDIR
INFORM PMLOAD	CHANGED		PATCHDIR
MATCH PM	CHANGED		PATCHDIR
MATCHALL XPM	CHANGED		PATCHDIR
NODESET ADD	CHANGED		PATCHDIR
LOADPM	CHANGED		DCHLTCDIR
QUERYPM	CHANGED		DCHLTCDIR

Command name: APPLY, REMOVE, CHECK, MATCH, MATCHALL, NODESET ADD

Command type

NON-MENU

Command target

Supernode/Briscc

Command availability

RES

Command description

These commands have been modified to allow for the input of DCH devices (they must be Enhanced DCH devices) as a type of XPM to be patched.

The actual syntax of all of the above commands has NOT changed from the existing XPM patcher commands, only the addition of the DCH pm type to allow patching on the DCH for the commands specified above.

The DCH to be patched MUST be a supported DCH for the EDCH Patching feature. This means that the DCH must be:

- An Enhanced EDCH (DCHPEC BX02BA)
- Present on a supported XPM Plus peripheral
- Contain a valid Enhanced DCH load.
- The DCH must be located in a port less than port 23 on the XPM.

Warning

No loss of data or service impact.

Command syntax

The command syntax for the above commands has not changed from the existing XPM patching system, with the exception that command will now support DCH pm types as patchable devices.

Parameter definitions

Not applicable.

Table 2-97 APPLY, REMOVE, CHECK, MATCH, MATCHALL, NODESET ADD
Parameter Definitions

PARAMETER	VALUE	DEFINITION

CHECK,APPLY, REMOVE, MATCH, or MATCHALL RESPONSES

The purpose of this MM section is mainly to provide the list of responses that the user may encounter when attempting to patch, perform a match on, or display DCH/XPM Patching information

Below is the list of responses that may appear during a patching action (CHECK, APPLY, REMOVE, MATCH, or MATCHALL) on a DCH or nodeset of DCHs.

'Request invalid - DCH <XXX> does not support patching.'

Explanation:

The DCH(s) being processed does not support the EDCH Patching feature. A DCH supports the feature under the conditions listed above in the commands section.

System action:

Patching action is aborted.

User action:

Ensure that the datafill for the requested DCH is correct. The DCHPEC in DCHINV must be BX02BA.

'Request invalid - Port number <PortNo> must be between 0 and <MaxPortNo>'

Explanation:

The DCH(s) being processed is located in a pside port number greater than the allowable port number supported for DCH patching (currently 23)

System action:

Patching action is aborted.

User action:

If the DCH is to be patched, it cannot reside on a PSIDE port number > 23.

'Request invalid - DCH patching is not supported on this PM type.'

Explanation:

The DCH(s) being processed is located on an XPM that does not support the EDCH patching feature.

System action:

Patching action is aborted.

User action:

If the DCH is to be patched, it cannot reside on an unsupported XPM

'Request invalid - <XPM> <Unit> is out of service.'

Explanation:

The DCH(s) being processed is located on an XPM that is not INSV or ISTB.

System action:

Patching action is aborted.

User action:

Correct the problem with the host XPM and retry the patching action.

'Request invalid - DCH <XXX> is in an invalid state.'

Explanation:

The DCH(s) being processed is not INSV/ISTB or MANB.

System action:

Patching action is aborted.

User action:

Correct the problem with the DCH and retry the patching action.

'Unknown DCH device: <string>'

Explanation:

The device entered on the command line for the CHECK/APPLY/REMOVE/MATCH commands could not be determined to be a valid DCH device.

System action:

Patching action is aborted.

User action:

Attempt the action again, checking to ensure that the correct DCH device was specified. If condition persists, contact the next level of NT support

'Request invalid - DCH loader is in use'

Explanation:

The patching action cannot be performed because the XPM is currently already loading or patching DCH devices on it.

System action:

Patching action is aborted.

User action:

Wait until the patching or loading of DCH devices on the XPM is complete and retry the request.

‘Could not allocate DCH patch data block.’**Explanation:**

The patch data resources required for patching DCH are not available at this time. This indicates that the maximum number of XPMs containing DCHs are currently loading or patching DCHs simultaneously

System action:

Patching action is aborted.

User action:

Wait until the patching or loading of DCH devices on one of the XPMs is complete and retry the request.

‘Could not get DCH patch data block.’**Explanation:**

This message indicates an error in finding the patch data information required during the patching steps for the CHECK/APPLY/REMOVE or MATCH commands.

System action:

Patching action is aborted.

User action:

Retry the request, if the error persists, contact the next level of NT support.

‘ERROR Cannot add an XPM to a DCH nodeset.’****Explanation:**

This message appears when attempting to add an XPM unit or range of XPM units to an existing DCH nodeset using the NODESET ADD command.

XPM units cannot be added to DCH nodesets.

System action:

Patching action is aborted.

User action:

None.

'ERROR Cannot add a DCH to an XPM nodeset.'****Explanation:**

This message appears when attempting to add a DCH device or range of DCH devices to an existing XPM nodeset using the NODESET ADD command.

DCH devices cannot be added to XPM nodesets.

System action:

Patching action is aborted.

User action:

None.

'INACTIVE MTC request failed for DCH <XXX> - It will not be patched.'**Explanation:**

Indicates that the DCH specified could not successfully register an inactive clone MTC request for patching (CHECK/APPLY/REMOVE).

System action:

Patching action is aborted for the DCH.

User action:

Retry the request. If the error persists, contact the next level of NT support

'ACTIVE MTC request failed for DCH <XXX> '**Explanation:**

Indicates that the DCH specified could not successfully register active clone MTC request for patching (CHECK/APPLY/REMOVE). This request will fail for every DCH in the nodeset, if patching by nodeset.

System action:

Patching action is aborted for the DCH and all DCHs in the nodeset, if patching by nodeset.

User action:

Retry the request, if the error persists, contact the next level of NT support

'No maintenance actions submitted'**Explanation:**

If the maintenance requests cannot be submitted for a DCH or a nodeset of DCH(s), this message will be output and the patching action will be aborted

System action:

Patching action is aborted for the DCH and all DCHs in the nodeset, if patching by nodeset.

User action:

Retry the request, if the error persists, contact the next level of NT support.

'Cannot convert DCH<XXX> to internal index'**Explanation:**

This message indicates that an error has been found in attempting to convert the external DCH identifier to an internal identifier

System action:

Patching action is aborted. A SWERR is generated as well.

User action:

Retry the request, if the error persists, contact the next level of NT support.

'<DCH MTCE/EISP Patcher> busy, try again later'

'DCH MTCE is busy, try again later'

'EISP Patcher busy (aborting), try again later'

'EISP Patcher busy, try again later'

Explanation:

Indicates that the EISP Patching task or the DCH Maintenance task in the host XPM is currently busy processing another request or is currently aborting a previous request.

System action:

Patching action is aborted.

User action:

Retry the request after waiting 5 minutes, If the error persists, contact the next level of NT support

'Patching failed - <failure reason>'**Explanation:**

The EISP Patching task was unable to process an invalid patch message to forward to the DCH(s) or there are no DCH(s) that the EISP patching task can communicate with. The failure reasons will be one of:

'Patching failed - patch already in progress'

The EISP is currently attempting to APPLY/CHECK/REMOVE or MATCH on a DCH already.

'Patching failed - invalid setup data'

The CM has provided an invalid setup message to the EISP Patching task.

'Patching failed - invalid patch msg'

'Patching failed - invalid msg sequence no.'

'Patching failed - Response not sent'

An invalid patch message (one that was unexpected or does not contain valid data) has been received by the EISP Patching task and rejected.

'Patching failed - No DCHs to patch'

After attempting to communicate with the DCH(s) to be patched, the EISP Patching task has determined that it cannot patch any of the DCH(s) specified to be patched by the CM.

System action:

Patching action is aborted.

User action:

Attempt the action again after waiting 5 minutes. If condition persists, contact the next level of NT support.

'Warning - invalid end msg received in EISP'

Explanation:

The patching action (CHECK/APPLY/REMOVE) has succeeded, however, the last message to the EISP has been lost or is invalid. The end message is used to inform the EISP that patching is complete.

System action:

None. The patch has been APPLIED/REMOVED/CHECKED correctly.

User action:

None required. The patching action has been completed.

'Patching failed. Try again'

Explanation:

The patching action (CHECK/APPLY/REMOVE) has failed most likely due to an initialization problem in the PM loader software.

System action:

Patching action is aborted.

User action:

Attempt the action again. If condition persists, contact the next level of NT support

'Cannot apply an XPM patch to a DCH device'**Explanation:**

An attempt to CHECK/APPLY an XPM patch to a DCH device is being made. XPM patches cannot be applied to DCH devices (DCH Patches cannot be applied to XPM units either)

System action:

Patching action is aborted.

User action:

Display the patch and ensure that the load name indicated in the patch is for the type of device attempting to be patched. Apply the patch to the correct device.

'Invalid patch action'**Explanation:**

An attempt to CHECK/APPLY a DCH patch to a XPM unit is being made. DCH patches cannot be applied to XPM units

System action:

Patching action is aborted.

User action:

Display the patch and ensure that the load name indicated in the patch is for the type of device attempting to be patched. Apply the patch to the correct device.

'DCH <XXX> <ACTION> failed: <reason>'

'DCH <XXX> CHECK failed: <failure reason>'

'DCH <XXX> APPLY failed: <failure reason>'

'DCH <XXX> REMOVE failed: <failure reason>'

'DCH <XXX> MATCH failed: <failure reason>'

Explanation:

An attempt to CHECK/APPLY/REMOVE a patch to/from a DCH or perform a MATCH on a DCH has failed. The reason for the failure can be one of:

- *'The DCH link is down'*

The DCH being patch is not communicating with the EISP because the DCH Patcher software is not present in the DCH load. This will occur if an attempt to patch an Enhanced DCH that contains a DCH (not an Enhanced DCH) load.

- *'The DCH has aborted the task'*

The EISP Patcher task has determined that the DCH has aborted the patching task. This could be due to other DCH maintenance action occurring at the same time as the patching action.

- *'The DCH was not loaded'*

The EISP Patching task could not communicate with the DCH load. Ensure that the DCH to be patched is loaded with a correct Enhanced DCH load.

- *'The ISP task was not setup'*

An error has occurred when initializing the EISP Patcher task.

- *'The DCH cannot be patched'*

The EISP cannot patch the DCH, possibly due to other DCH maintenance.

- *'Cannot setup EISP, try again later'*

'Cannot setup EISP data, try again later'

The above two messages indicate the EISP Patching task is in an invalid state to begin patching DCHs. Attempt to try again after waiting at least 2 minutes.

- *'Invalid patch msg received'*

'Invalid patch seqno received'

'Response not sent'

The three above messages will be received if DCH patch messages are received out of sequence or when not expected by the EISP Patching task.

This could be due to a timing error between the CM and the EISP Patching task.

- *'Internal software error'*

'The requested function is not supported'

'Out of sequence message'

'Too many name messages'

'Invalid message format'

'Unexpected message received'

'Offset too large'

'Inconsistent internal state'

'Unable to abort patch action'

'Patch action abort in progress'

'A duplicate procedure was found'

The above 11 messages refer to an internal problem with the (Enhanced) DCH Patching task interpreting the patch records sent to it. Contact the next level of NT support.

The patching action (CHECK/APPLY/REMOVE/MATCH) may fail for one of the reasons indicated above OR for any of the EXISTING XPM patching action failure reasons.

System action:

The DCH being flagged with the error is not patched.

User action:

Correct the problem if possible (see notes above for errors AND the patching procedures NTP for existing XPM patching error messages). If problem persists, contact the next level of NT support.

'Response 'DCH <XXX> <ACTION> passed.'

'DCH <XXX> CHECK passed.

'DCH <XXX> APPLY passed.

'DCH <XXX> REMOVE passed.

Explanation:

The patching action has passed for the specified DCH.

System action:

No action is required

User action:

No action is required.

'DCH <XXX> MTC Aborted : <reason>'

Explanation:

The patching action currently in progress has been aborted for the specified DCH. The most likely reason that the task was aborted is one of the following:

- *'higher prio mtc (takeover)'*
The patching action has been aborted due to a DCH takeover occurring on one or more of the DCHs currently being patched.
- *'ABTK from user '*
Another user has aborted the patching task using the ABTK command from the MAP. The user is specified.
- *'higher prio mtc (swact)'*
The host XPM for the DCHs has undergone a switch of activity. The patching task is aborted.

System action:

The system will abort the current patching action.

User action:

Retry the patching action after the reason for the abort has been resolved.

'Request Invalid - DCH <XXX> is under MTC'**Explanation:**

The DCH currently undergoing the patching action is busy with another maintenance action.

System action:

The DCH patching action is aborted. If a nodeset of DCHs is being patched, all of the DCH patching actions are aborted (the whole nodeset)

User action:

Wait until the maintenance is complete for all DCHs in the nodeset and try again.

'Warning! Patch data is lost. CM not updated.'**Explanation:**

The patching data collected during the patching action has been lost.

System action:

No action is taken. The patch status for the DCH(s) patched are not updated.

User action:

Perform a MATCH on the DCH (if a single DCH is undergoing the patching action) or MATCH on the nodeset of DCHs if a nodeset is being used. This should update the CM status information for the patch and the DCH(s)

'Warning -Status change for DCH <XXX> failed.'**Explanation:**

The CM was not able to update the status record for the DCH for the patch just APPLIED/REMOVED.

System action:

No action is taken. The patch status for the DCH(s) patched are not updated.

User action:

Perform a MATCH on the DCH (if a single DCH is undergoing the patching action) or MATCH on the nodeset of DCHs if a nodeset is being used. This should update the CM status information for the patch and the DCH(s)

If the status is still not updated, contact the next level of NT support.

' WARNING ** Failed to get loadname from DCH <XXX>'****Explanation:**

The loadname could not be retrieved from the DCH after an APPLY/REMOVE or MATCH action. Consequently, the loadset information for the patch cannot be updated.

This will occur if the DCH is patched when in a MANB state.

System action:

If APPLYING a patch for the first time, no loadset is allocated for the patch.

If a loadset already exists for the load in the patch, the patch is not set to needed (applied) in the loadset and the DCH (if not already) is not tied to the loadset.

If REMOVING a patch, the loadset (if the DCH is tied to a loadset) is not updated to remove the patch.

User action:

If the DCH is in a MANB state during that patching action, perform an RTS on the DCH and then perform a MATCH.

If the message appears when the DCH is INSV/ISTB, perform a MATCH on the DCH to correct the loadset status.

' WARNING ** Failed to set DCH <XXX> to loadset'****Explanation:**

The attempt to set a DCH to a loadset after an APPLY/MATCH patching action has been done has failed.

System action:

The DCH is not tied a loadset.

User action:

Use the SET command to tie the DCH to the loadset or perform a MATCH on the DCH when it is INSV/ISTB.

'DCHs already being loaded or patched on the XPM'**Explanation:**

When attempting a MATCH/MATCHALL action on a DCH, if any of the DCHs on the same XPM are already being loaded or patched from a different user, subsequent requests for any DCH on the XPM will fail until the first request is complete.

System action:

The patching action is aborted

User action:

Wait until the patching or loading action currently active is complete and try again.

'ERROR: The state of DCH <XXX> is not appropriate for patching'****Explanation:**

This message is output during the auto-application of XPM/DCH patches. It is output when the DCH attempting to be patched is not in a valid state for auto-apply patching. The state must be INSV or ISTB.

System action:

The patching action is aborted

User action:

Correct the state of the DCH and try again.

'ERROR: Cannot apply a DCH patch to an XPM nodeset.'****Explanation:**

An attempt to apply a DCH patch to an XPM nodeset is being made. DCH patches cannot be applied to XPM nodesets.

System action:

The patching action is aborted

User action:

None.

'The DCH software is not present in the switch.'**Explanation:**

The DCH patching software (module DCHPATCH) is not present in the switch.

System action:

The patching action is aborted

User action:

Contact the next level of NT support if the software should be present.

'ERROR: Nodeset specified is not a DCH nodeset.'****Explanation:**

The nodeset to be CHECKED/APPLIED/REMOVED is not a DCH nodeset.

System action:

The patching action is aborted

User action:

Ensure that the nodeset to be used is the correct type (DCH) for the patch to be CHECKED/APPLIED/REMOVED

****ERROR: Cannot apply an XPM patch to a DCH nodeset.'****Explanation:**

An attempt to apply an XPM patch has been made on a DCH nodeset.

XPM patches cannot be applied to DCH devices.

System action:

The patching action is aborted

User action:

None.

'Could not allocate temporary nodeset.'**Explanation:**

When processing a nodeset of DCH devices for the CHECK/APPLY/REMOVE commands, a temporary nodeset is allocated (TM\$DCHNS) in table PATNS. If this nodeset cannot be allocated the above message will be output. The nodeset could not be allocated for one of two reasons:

1. The nodeset is already in use or was not deallocated due to an error.
In this case, the nodeset TM\$DCHNS will be present in table PATNS.
2. The maximum number of nodesets has been allocated already.

System action:

The patching action is aborted

User action:

If the nodeset exists in table PATNS, ensure that there are no users of the patching system (currently patching DCH devices) and then delete the nodeset using the NODESET DELETE command. Re-try the CHECK/APPLY/REMOVE. If the error persists, contact the next level of NT Support.

If the maximum number nodesets is allocated (use the NODESET QUERY command to determine the allocation), then an existing nodeset must be removed in order to perform the DCH patching via a nodeset.

'Processing DCH devices on <XPM> <unit>'**Explanation:**

This informational message is output to indicate which DCH(s) are currently being CHECKED/APPLIED/REMOVED on the current XPM. For DCH patching, DCH nodesets are pre-processed to segregate the DCH(s) on each XPM and then processed in parallel for each XPM.

System action:

The requested patching action is performed on the DCH(s) listed after the above message. The following message is output for each DCH on the XPM being processed:

'Processing DCH <XXX>'

User action:

None.

Notes**Examples**

Below are some examples of the CHECK, APPLY, REMOVE, MATCH, MATCHALL XPM and NODESET ADD commands. Examples are for single DCHs and for DCH nodeset applications.

Example 1: Unsupported DCH device.

```
>check xng10x37 pm dch 0
```

Patch information taken from file XNG10X37\$PATCH.

Checking patch XNG10X37 for application:
Request invalid - DCH 0 does not support patching.
Patch XNG10X37 not checked.

Example 2: Successful CHECK of a patch.

>check xng10x37 pm dch 1
Patch information taken from file XNG10X37\$PATCH.
Checking patch XNG10X37 for application:
DCH 1 CHECK passed
Patch XNG10X37 checked.

Example 3: Unsuccessful CHECK (other patch is needed)

>check xng11x37 pm dch 1
Patch information taken from file XNG11X37\$PATCH.
Checking patch XNG11X37 for application:
**ERROR: Patch XNG10X37 needed but not applied.
Will continue checking.
DCH 1 CHECK failed: A needed patch is missing
Patch XNG11X37 not checked.

Example 4: Unsuccessful nodeset CHECK (other patch is needed)

>check xng11x37 ns dchns
Nodeset specified: DCHNS
Checking patch XNG11X37 against nodeset DCHNS

Processing DCH devices on LTC 4
Processing DCH 0
Processing DCH 1
Processing DCH 2
Patch information taken from file XNG11X37\$PATCH.
Checking patch XNG11X37 for application:
**ERROR: Patch XNG10X37 needed but not applied.
Will continue checking.
DCH 2 CHECK failed: A needed patch is missing
DCH 0 CHECK failed: A needed patch is missing
DCH 1 CHECK failed: A needed patch is missing
Patch XNG11X37 not checked.
Failure #1; tolerance = 0
Tolerance limit exceeded

Example 5: Successful nodeset CHECK

```
>check xng10x37 ns dchns
Nodeset specified: DCHNS
Checking patch XNG10X37 against nodeset DCHNS
*****
Processing DCH devices on LTC 4
Processing DCH 0
Processing DCH 1
Processing DCH 2
Patch information taken from file XNG10X37$PATCH.
Checking patch XNG10X37 for application:
DCH 2 CHECK passed
DCH 0 CHECK passed
DCH 1 CHECK passed
Patch XNG10X37 checked.
>
```

Example 6: Successful Apply

```
>apply xng10x37 pm dch 2
Patch information taken from file XNG10X37$PATCH.
Checking patch XNG10X37 for application:
DCH 2 CHECK passed
Patch XNG10X37 checked.
DCH 2 PATCH passed
New loadset created: EDH03BR
Patch XNG10X37 applied.
>
>apply xng10x37 pm dch 1
Patch information taken from file XNG10X37$PATCH.
Checking patch XNG10X37 for application:
DCH 1 CHECK passed
Patch XNG10X37 checked.
DCH 1 PATCH passed
Patch XNG10X37 applied.
```

Example 7: Successful nodeset Apply

```
>apply xng10x37 ns dchns
Nodeset specified: DCHNS
Applying patch XNG12X37 against nodeset DCHNS
*****
Processing DCH devices on LTC 4
```

```
Processing DCH 0
Processing DCH 1
Processing DCH 2
Patch information taken from file XNG12X37$PATCH.
Checking patch XNG12X37 for application:
DCH 2 CHECK passed
DCH 0 CHECK passed
DCH 1 CHECK passed
Patch XNG12X37 checked.
DCH 2 PATCH passed
DCH 0 PATCH passed
DCH 1 PATCH passed
Patch XNG12X37 applied.
```

Example 8: Successful Apply to a MANB DCH.

```
>apply xng11x37 pm dch 2
Patch information taken from file XNG11X37$PATCH.
Checking patch XNG11X37 for application:
DCH 2 CHECK passed
Patch XNG11X37 checked.
DCH 2 PATCH passed
** WARNING ** Failed to get loadname from DCH 2
Patch XNG11X37 applied.
```

Example 9: Unsuccessful Apply (patch is already applied)

```
>apply xng12x37 pm dch 0
Patch information taken from file XNG12X37$PATCH.
Checking patch XNG12X37 for application:
DCH 0 CHECK failed: Patch is at requested status
Patch XNG12X37 did not check.
Patch XNG12X37 not applied.
```

Example 10: Abort of a patch (DCH takeover)

```
>apply xng11x37 pm dch 0
Patch information taken from file XNG11X37$PATCH.
Checking patch XNG11X37 for application:
DCH 0 CHECK Aborted : higher prio mtc (takeover)
Patch XNG11X37 did not check.
Patch XNG11X37 not applied.
```

Example 11: Abort of a patch (ABTK by other user)

```
>apply xng11x37 pm dch 0
Patch information taken from file XNG11X37$PATCH.
Checking patch XNG11X37 for application:
DCH 0 CHECK Aborted : ABTK from user CMAP15
Patch XNG11X37 did not check.
Patch XNG11X37 not applied.
```

Example 12: Successful Removal of a patch (last patch in the DCH)

```
>remove xng10x37 pm dch 1
DCH 1 REMOVE passed
Patch removed from loadset EDH03BR
DCH 1 unset from loadset EDH03BR
Patch XNG10X37 removed.
```

Example 13: Successful MATCH of a DCH.

```
PATCHER:
>match pm dch 0
No difference between patch list in DCH 0 and CC
```

Example 14: Successful MATCH of a DCH nodeset.

```
>match ns dchns
Matching nodeset: DCHNS
Processing node DCH 0
No difference between patch list in DCH 0 and CC
Processing node DCH 1
No difference between patch list in DCH 1 and CC
Processing node DCH 2
No difference between patch list in DCH 2 and CC
```

Example 15: MATCH of a DCH with a CM/DCH mismatch

```
>match pm dch 2
Patches listed in DCH 2 that are not in CC/CM
XNG10X37
```

Example 16: Successful MATCHALL XPM

```
>matchall xpm
Matching node:DTC 0 0
CC/CM updated to reflect PM patch statuses
Matching node:DTC 0 1
Searched user directory, SFDEV, PADNDEV and PMLOAD devices for XPV00X36.
**ERROR: Patch file not found for XPV00X36.
```

List volume with XPV00X36 then manually MATCH UPDATE this node.

Matching node:LTC 0 0

CC/CM updated to reflect PM patch statuses

Matching node:LTC 0 1

CC/CM updated to reflect PM patch statuses

Matching node:LTC 4 0

CC/CM updated to reflect PM patch statuses

Matching node:LTC 4 1

CC/CM updated to reflect PM patch statuses

Matching node:RCC 0 0

CC/CM updated to reflect PM patch statuses

Matching node:RCC 0 1

CC/CM updated to reflect PM patch statuses

Matching node:MSB7 0 0

CC/CM updated to reflect PM patch statuses

Matching node:MSB7 0 1

CC/CM updated to reflect PM patch statuses

Matching node:DCH 0

CC/CM updated to reflect PM patch statuses

Matching node:DCH 1

CC/CM updated to reflect PM patch statuses

Matching node:DCH 2

CC/CM updated to reflect PM patch statuses

Example 17: Successful NODESET ADD

```
>nodeset add mydchs pm dch 0
```

Ok

Example 18: Unsuccessful NODESET ADD

```
>nodeset add mydchs pm ltc 0 0
```

ERROR** Cannot add an XPM to a DCH nodeset.

Command name: INFORM (LIST, PM, PMALL, SUMMARY, PMLOAD)

Command type

NON-MENU

Command target

SuperNode/Brisco

Command availability

RES

Command description

These commands have been modified to allow for the input of DCH PM types (for the INFORM PM command) and to output both DCH and XPM patch information under the XPM class of patching information generated by the INFORM commands.

There is no distinction between an XPM patch or a DCH patch in the INFORM output, except for a minor discrepancy between the MODULES section for DCH patches and XPM patches listed in the INFORM LIST and INFORM LIST FULL commands.

See the EXAMPLES section for examples of the INFORM LIST, INFORM LIST FULL, INFORM PM, INFORM PMALL, INFORM SUMMARY and INFORM PMLOADS.

Warning

No loss of data or service impact.

Command syntax

The command syntax for the above commands has not changed from the existing XPM patching system, with the exception that command will now support DCH pm types as patchable devices.

Parameter definitions

Not applicable.

Table 2-98INFORM Parameter Definitions

PARAMETER	VALUE	DEFINITION

INFORM RESPONSES

No responses to the INFORM command have been altered for this feature. See the EXAMPLES section for examples of the INFORM command.

Notes

None

Examples

Example 1: INFORM LIST¹

```
>inform list
  IPL          MBCS37
1994/06/13 20:48:18.197 MON.
* CM Patches
PATCH ID      INFO A TP    MODULES    TYPE  DATE      TIME      CAT      T ASR  R ST
-----
No patches of this target
* END CM Patches

* XPM Patches
PATCH ID      INFO A TP    MODULES    TYPE  DATE      TIME      CAT      T ASR  R ST
-----
XNG12X37      Y PM    -    3    3 SRC  94/06/13 20:37:33    C YNN NR A
XNG10X37      Y PM    -    2    3 SRC  94/06/13 20:33:46    C YNN NR A
* END XPM Patches

* MS Patches
PATCH ID      INFO A TP    MODULES    TYPE  DATE      TIME      CAT      T ASR  R ST
-----
No patches of this target
* END MS Patches

* LIU Patches
PATCH ID      INFO A TP    MODULES    TYPE  DATE      TIME      CAT      T ASR  R ST
-----
No patches of this target
* END LIU Patches

* LIM Patches
PATCH ID      INFO A TP    MODULES    TYPE  DATE      TIME      CAT      T ASR  R ST
-----
No patches of this target
* END LIM Patches
```

¹Note that unlike XPMs, the MODULES section only has information for 1 UNIT (similar to LIU7 devices). This is because DCHs devices are single unit devices. The number of DCHs patched with a patch is represented by the second field under the MODULES heading.

* ENET Patches

PATCH ID	INFO A TP	MODULES	TYPE	DATE	TIME	CAT	T ASR	R ST
-----	-----	-----	----	----	----	---	- - - -	- - -

No patches of this target

* END ENET Patches

* FP Patches

PATCH ID	INFO A TP	MODULES	TYPE	DATE	TIME	CAT	T ASR	R ST
-----	-----	-----	----	----	----	---	- - - -	- - -

No patches of this target

* END FP Patches

* NIU Patches

PATCH ID	INFO A TP	MODULES	TYPE	DATE	TIME	CAT	T ASR	R ST
-----	-----	-----	----	----	----	---	- - - -	- - -

No patches of this target

* END NIU Patches

* Site Admin Information

PATCH ID	INFO A TP	MODULES	TYPE	DATE	TIME	CAT	T ASR	R ST
-----	-----	-----	----	----	----	---	- - - -	- - -

No patches of this target

* END Site Admin Information

* Patchable PM Loads

** XPM loads

DC702CJ

ECL02CN

NLT02CJ

ELI02CJ

MC7XB07

ESR02CN

EDH02CJ

** END XPM loads

** MS loads

MSX02A0

** END MS loads

** LIU loads

LRS02A0

** END LIU loads

** LIM loads

LPX02A0

** END LIM loads


```

** ENET loads
   No loads present
** END ENET loads

** FP loads
   No loads present
** END FP loads

** NIU loads
   No loads present
** END NIU loads
* END Patchable PM Loads

* Non-patchable Loads
  RMM34C
  BTMKA02
  MTMKA02
  RSM
  BLMTA03
  BRLMUA01
  ADCMPA01
  LCM01D
  LCME02H
  M7CQA01
* END Non-patchable Loads

* Defined Loadsets
  EDH03BR 94/06/13 20:33:46
* END Defined Loadsets

* END of INFORM
>

```

Example 2: INFORM LIST FULL

```

>inform list full
  IPL          MBCS37
1994/06/13 20:48:31.120 MON.
* CM Patches
PATCH ID      INFO A TP      MODULES      TYPE  DATE      TIME      CAT      T ASR  R ST
-----
No patches of this target
* END CM Patches

* XPM Patches
PATCH ID      INFO A TP      MODULES      TYPE  DATE      TIME      CAT      T ASR  R ST
-----
XNG12X37      Y PM      -      3      3 SRC  94/06/13 20:37:33      C YNN NR A
                  DCH      0 - A

```

* END XPM Patches

No patches of this target

No patches of this target

No patches of this target

No patches of this target

No patches of this target

No patches of this target

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PATCH ID	INFO A TP	MODULES	TYPE	DATE	TIME	CAT	T ASR	R ST
No patches of this target								
* END Site Admin Information								
* Patchable PM Loads								
** XPM loads								
DC702CJ								
ECL02CN								
NLT02CJ								
ELI02CJ								
MC7XB07								
ESR02CN								
EDH02CJ								
** END XPM loads								
** MS loads								
MSX02A0								
** END MS loads								
** LIU loads								
LRS02A0								
** END LIU loads								
** LIM loads								
LPX02A0								
** END LIM loads								
** ENET loads								
No loads present								
** END ENET loads								
** FP loads								
No loads present								
** END FP loads								
** NIU loads								
No loads present								
** END NIU loads								
* END Patchable PM Loads								
* Non-patchable Loads								
RMM34C								
BTMKA02								
MTMKA02								
RSM								
BLMTA03								
BRLMUA01								
ADCPA01								

```

    LCM01D
    LCME02H
    M7CQA01
* END Non-patchable Loads

* Defined Loadsets
    EDH03BR  94/06/13 20:33:46
* END Defined Loadsets

* END of INFORM

```

Example 3: INFORM PM

```

>inform pm dch 0
    IPL      MBCS37
1994/06/13 20:48:43.000 MON.
    Uses load name set EDH03BR

```

PATCH ID	PATCHSET	LOADSET
-----	-----	-----
XNG12X37	A	NE
XNG10X37	NE	NE

Example 4: INFORM PMALL

```

>inform pmall
    IPL      MBCS37
1994/06/13 20:48:47.184 MON.

```

```

-----
PERIPHERAL PATCHES
-----

```

```

DTC      0 0
DTC      0 1
LTC      0 0
LTC      0 1
LTC      1 0
LTC      1 1
LTC      2 0
LTC      2 1
LTC      4 0
LTC      4 1
RCC      0 0
RCC      0 1
MSB7     0 0
MSB7     0 1
DCH      0

```

```

    Uses load name set EDH03BR

```

PATCH ID	PATCHSET	LOADSET
-----	-----	-----
XNG12X37	A	NE

```

      XNG10X37      NE      NE
DCH      1
Uses load name set EDH03BR

```

```

      PATCH ID      PATCHSET      LOADSET
      -----      -
      XNG10X37      A      NE
      XNG12X37      A      NE

```

```

DCH      2
Uses load name set EDH03BR

```

```

      PATCH ID      PATCHSET      LOADSET
      -----      -
      XNG10X37      A      NE
      XNG12X37      A      NE

```

```

-----
ISN PATCHES
-----

```

```

LIU7  101
LIU7  102
LIU7  108
LIU7  201
LIU7  202
LIU7  207
LIU7  208
LIU7  301
LIU7  302
LIU7  308
LIM    0 0
LIM    0 1

```

Example 5: INFORM PMLOAD

```

>inform pmload
      IPL      MBCS37
1994/06/13 20:49:00.850 MON.

```

```

* Patchable PM Loads

```

```

** XPM loads

```

```

      DC702CJ
      ECL02CN
      NLT02CJ
      ELI02CJ
      MC7XB07
      ESR02CN
      EDH02CJ

```

```

** END XPM loads

```

```

** MS loads

```

```

      MSX02A0

```

```

** END MS loads

```

```
** LIU loads
    LRS02A0
** END LIU loads

** LIM loads
    LPX02A0
** END LIM loads

** ENET loads
    No loads present
** END ENET loads

** FP loads
    No loads present
** END FP loads

** NIU loads
    No loads present
** END NIU loads
* END Patchable PM Loads

* Non-patchable Loads
    RMM34C
    BTMKA02
    MTMKA02
    RSM
    BLMTA03
LCM01D
    LCME02H
    M7CQA01
* END Non-patchable Loads

* Defined Loadsets
    EDH03BR  94/06/13 20:33:46
* END Defined Loadsets
```

Example 6: INFORM SUMMARY

```
>inform summary
    IPL          MBCS37
1994/06/13 20:53:57.326 MON.
* CM Patches
-----
No patches of this target
-----
* END CM Patches

* XPM Patches
-----
BCS37:
```

Highest Sequence No: 0000	
Patches applied	2
Patches applied by pkg	0
Patches replaced by pkg	0
Patches removed	0
Patches aborted	0
Patches not needed	0
Patches dlchecked	1

Total	3

Target Total	3

* END XPM Patches

* MS Patches

No patches of this target

* END MS Patches

* LIU Patches

No patches of this target

* END LIU Patches

* LIM Patches

No patches of this target

* END LIM Patches

* ENET Patches

No patches of this target

* END ENET Patches

* FP Patches

No patches of this target

* END FP Patches

* NIU Patches

No patches of this target

* END NIU Patches

* END of INFORM

Command name: LOADPM, QUERYPM, QUERYPM FLT)

Command type

MENU

Command target

SuperNode/BrisC

Command availability

RES

Command description

The LOADPM command is used to load a DCH or a posted set of DCH(s) from the DCH level of the MAP. The LOADPM command has been altered to output messages that may appear during the loading and patching (patching is done after the loading of a DCH automatically if a loadset is allocated for the load)

The QUERYPM command has been altered to output the patch status information of a DCH device.

The QUERYPM FLT command has been altered so that the ISTB fault reason for a patch mismatch is output if the DCH is in the ISTB condition.

For more detail on the responses of the LOADPM and QUERYPM command, see the Responses section below.

Warning

No loss of data or service impact.

Command syntax

The command syntax for the above commands has not changed from the existing DCH loading system or the querying command.

Parameter definitions

Not applicable.

Table 2-99LOADPM, QUERYPM, QUERYPM FLT Parameter Definitions

PARAMETER	VALUE	DEFINITION

LOADPM, QUERYPM, QUERYPM FLT RESPONSES

'DCH <XXX> Request submitted for loading and patching'

Explanation:

When loading a DCH or a posted set of DCHs, this message will appear if the DCHs to be loaded are tied to a loadset (of the same name as the load being loaded) and there are patches required in the loadset.

System action:

Patching will automatically be performed after the DCH is loaded for each DCH that the above message appears for.

User action:

None.

'DCH <XXX> Patching passed'

Explanation:

After loading and patching of the DCHs has been completed, this message will appear if the DCH has been successfully patched.

System action:

None.

User action:

None.

'DCH <XXX> Patching failed: Patchname <patchname>'

'DCH <XXX> Patching failed: Patchname <patchname>'

<failure reason>

Explanation:

The patching phase after loading the DCH has failed on the DCH specified for the given reason. The failure reasons will be one of the reasons specified above in the CHECK/APPLY/REMOVE section.

System action:

Patching for that DCH is aborted. Patches that would normally be applied in the DCH after the failed patch will not be applied.

User action:

If possible, correct the problem that caused the patching failure (see reasons for CHECK/APPLY/REMOVE commands).

If problem persists contact next level of NT support.

'DCH <XXX> Patching failed: reason unknown, try again'**Explanation:**

The patching phase after loading the DCH has failed on the DCH for an unknown reason (the reason could not be determined).

System action:

Patching for the posted DCH set is not continued.

User action:

Re-try the loading and patching. If the problem persists contact next level of NT support.

' Warning: All patches beyond failed patch will not be processed.'**Explanation:**

The patching phase after loading the DCH has failed on a DCH and this message will warn the user that patches in the loadset after the patch that failed will NOT be applied to the DCH(s) that failed.

System action:

Patching for the failed DCH(s) is not continued.

User action:

If possible, correct the problem that caused the patching failure (see reasons for CHECK/APPLY/REMOVE commands).

If problem persists contact next level of NT support.

'DCH is patched'**Explanation:**

As part of the QUERYPM command, if the DCH has all of the patches required for the DCH load applied in it, this message is output to indicate that the DCH is (completely) patched. This is an informational message only.

System action:

None.

User action:

None

'Warning! DCH is missing patches'**Explanation:**

As part of the QUERYPM command, if the DCH has some, but not all of the patches required for the DCH load applied in it, this message is output to indicate that the DCH is not completely patched. This is an informational message only.

System action:

None.

User action:

The missing patches can be applied to the DCH to ensure that the DCH is entirely patched or the DCH can be reloaded with the same load and the patches will be automatically applied. Use the INFORM PM command to determine which patches are applied and which patches are needed.

'Patch Mismatch'**Explanation:**

As part of the QUERYPM FLTcommand this message is displayed as the Inservice Trouble (ISTB) reason for a mismatch between the patch database in the CM and the patch database in the DCH.

System action:

The DCH is set to ISTB by the MATCH command if a mismatch is discovered, or by the PM Patch Audit if a mismatch is discovered.

User action:

1. Perform a MATCH UPDATE on the DCH that is at ISTB to correct the mismatch between the DCH and the CM.

OR

2. Perform a MATCHALL XPM

In both cases above the ISTB flag is cleared.

Notes

None

Examples

LOADPM example with a patch failure

```
>mapci nodisp;mtc;pm;post ltc 4;dch; post 0;querypm
MAPCI:
MTC:
PM:
POST:
DCH:
LoadPM cc edh03br
DCH 0 Request submitted for loading and patching
DCH 0 Loading Passed : EDH03BR
DCH 0 Patching Failed: Patchname XNG11X37
      A needed patch is missing
Warning: All patches beyond failed patch will not be processed.
```

QUERYPM with a completely patched DCH

```
>mapci nodisp;mtc;pm;post ltc 4;dch; post 0;querypm
MAPCI:
MTC:
PM:
POST:
DCH:
  Site Flr RPos  Bay_id  Shf  Description      Slot      EqPEC
  HOST  01  D06  LTEI 00   18  LTC : 004       01       BX02
Loadnames : DCHINV - EDH03BR , DCH - EDH03BR ; INTL INDEX : 0
DCH is patched
```

QUERYPM with missing patches

```
>mapci nodisp;mtc;pm;post ltc 4;dch;post 2;querypm
MAPCI:
MTC:
PM:
POST:
DCH:
  Site Flr RPos  Bay_id  Shf  Description      Slot      EqPEC
  HOST  01  D06  LTEI 00   18  LTC : 004       02       BX02
Loadnames : DCHINV - EDH02CJ ; INTL INDEX : 2
Warning! DCH is missing patches
```

QUERYPM FLT example with CM/DCH patch mismatch

```
>querypm flt
Site Flr RPos Bay_id Shf Description Slot EqPEC
HOST 01 D06 LTEI 00 18 LTC : 004 02 BX02
Loadnames : DCHINV - EDH02CJ , DCH - EDH03BR ; INTL INDEX : 2
Warning! DCH is missing patches
DCH is ISTb
The following inservice trouble conditions exist:
Loadname
Patch Mismatch
>
```

Alarms**Alarm name:****Conditions required to raise the alarm****Duration of the alarm**

AR0469mm.aa08**Directories**

Not Applicable. No new nor modified directory is introduced by this activity.

Table of new/modified directories**Table 2-100New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Not applicable

Accessing directory:

Not applicable

To access

Not applicable

To return to CI

Not applicable

Commands

No new command added nor modified by this activity. But we can make use of the exist query commands to query the current SLE status.

Table of New/modified commands**Table 2-101New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Not applicable

Command name:

QDN

QLEN

QSL

Command type

Non-Menu

Command target

NT40 and Supernode

Command availability

RES

Command description

QDN - Given the DN(s), display the DN's informations

QLEN - Given the LEN(s), display the LEN's informations

QSL - Query the entries on SLE lists

Warning

Not applicable

Command syntax

QDN <dn(s)>

QLEN <len(s)>

QSL <dn(s)> <feature name>

Parameter definitions

Table 2-102QDN Parameter Definitions

PARAMETER	VALUE	DEFINITION
<dn(s)>	Directory Number	one or more directory numbers of the data units
<len(s)>	Line Equipment Number	one of more LEN numbers of the data units
<feature name>	ALL, SCRJ, SCA, SCF	SLE feature name, ALL is all SLE features

Responses

QDN will display the informations for the <dn(s)>

QLEN will display the informations for the <len(s)>

QSL will display the SLE list for the <feature name> of the <dn(s)>

Explanation

Not applicable.

System action

Not applicable

User action

Not applicable

Notes

Not applicable

Examples

Example 1 - QSL

>QSL 6714056 ALL

DN: 6714056

LEN: HOST 02 0 12 06

KEY 1

SCA feature is ACTIVE and will not generate AMA record.

Contents of SCA list are:

4161234567

4164523000

Example 2 - QDN

>QDN 6210100
DN: 6210100
TYPE: SINGLE PARTY LINE
SNPA: 416 SIG: DT LNATTIDX: 0
LINE EQUIPMENT NUMBER: HOST 02 0 01 00
LINE CLASS CODE: 1FR
IBN TYPE: STATION
CUSTGRP: RESG000 SUBGRP: 0 NCOS: 0
CARDCODE: 6X17AC GND: H PADGRP: STD LN BNV: NL MNO: N
PM NODE NUMBER: 26
PM TERMINAL NUMBER: 33
OPTIONS:
CWT DGT
RES OPTIONS:
SCF NOAMA INACT SCRJ NOAMA ACT \$

Example 3 - QLEN

>QLEN HOST 2 0 1 0
DN: 6210100
TYPE: SINGLE PARTY LINE
SNPA: 416 SIG: DT LNATTIDX: 0
LINE EQUIPMENT NUMBER: HOST 02 0 01 00
LINE CLASS CODE: 1FR
IBN TYPE: STATION
CUSTGRP: RESG000 SUBGRP: 0 NCOS: 0
CARDCODE: 6X17AC GND: H PADGRP: STD LN BNV: NL MNO: N
PM NODE NUMBER: 26
PM TERMINAL NUMBER: 33
OPTIONS:
CWT DGT
RES OPTIONS:
SCF NOAMA INACT SCRJ NOAMA ACT \$

Alarms**Alarm name:**

Not applicable

Conditions required to raise the alarm

Not applicable

Duration of the alarm

Not applicable

AR0514mm.aa04**Directories**

No directories are affected by this feature.

Table of new/modified directories**Table 2-103New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

N/A

To access

N/A

To return to CI

N/A

Commands**Table of New/modified commands****Table 2-104New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
LISTFL	CHANGED		DISKUTDIR
RESTORE	CHANGED		DISKUTDIR

Command name: LISTFL**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The LISTFL commands is used to list the files on the SLM disk volumes, SLM cartridge tapes, FP disk volumes, and FP digital-audio tapes. This feature is only concerned with SLM cartridge tapes.

Warning**Command syntax**

- For switches that do not have FTFS in the load:

```
LISTFL [<VOLUME NAME> DEVICE name
      [<TAPE LISTING FORMAT> {NORMAL, SHORT}]
      [<HOW MANY TAPE BACKUP VOLUMES>
        {ALL,
         FIRST [<NUMBER OF VOLUMES> {1 TO 32}]]]
```

- For switches that have FTFS in the load:

```
LISTFL [<LOCAL VOLUME NAME> DEVICE name
      [<TAPE LISTING FORMAT> {NORMAL, SHORT}]
      [<HOW MANY TAPE BACKUP VOLUMES>
        {ALL,
         FIRST [<NUMBER OF VOLUMES> {1 TO 32}]]]
      [<FTFS PATHNAME> FILE name]
      [<REMOTE VOLUME NAME> STRING]
      [<REMOTE NODE NAME> STRING]
```

Notes:

- On switches that have FTFS in the load, the command “Q LISTFL” will not show the “TAPE LISTING FORMAT” and “HOW MANY TAPE BACKUP VOLUMES” components of the LISTFL syntax. (These components are outlined with change bars in the “FTFS” syntax above.) However, these components are fully described by the “HELP LISTFL FULL” command.
- When the “FIRST” parameter is used, the LISTFL command is unable to determine if the listed files are invalid. Thus, invalid files will be detected by the subsequent BACKUP attempt, and not by LISTFL.

Parameter definitions**Table 2-105**

PARAMETER	VALUE	DEFINITION
NORMAL	N/A	default: requests the pre-AR0514 listing be generated
SHORT	N/A	requests that a multi-column listing be generated
ALL	N/A	default: requests that the pre-AR0514 listing be generated
FIRST	N/A	requests that only the first few backup volumes be listed
<NUMBER OF VOLUMES>	1–32	the number of backup volumes to list; default is 1

Responses**Response****Explanation****System action****User action**

Examples

Command name: RESTORE

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command is used to restore backed-up disk files and disk volumes from a tape unit to a disk drive. This feature is only concerned with restoring files and volumes from the SLM cartridge tape unit.

Warning

Command syntax

```
RESTORE <WHICH FILES> {FILE <DISK VOLUME NAME> STRING
                        <TAPE DEVICE NAME> STRING
                        <RESTORE FILE NAME> STRING
                        [<RESTORE VOLUME NAME> FILE name],
                        STDVOL <DISK VOLUME NAME> DEVICE name
                        <TAPE DEVICE NAME> STRING
                        <RESTORE VOLUME NAME> FILE name}
```

Parameter definitions**Table 2-106**

PARAMETER	VALUE	DEFINITION
<RESTORE VOLUME NAME>	FILE name	optional: specifies which volume the given restore file is to be restored from

Responses**Explanation****System action****User action****Notes****Examples****Alarms****Alarm name:**

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AR0517mm.ab01

Directories

Table of new/modified directories

Table 2-107 Directories for New, MAP levels.

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
FPSSDIR	NEW	N/A	S/NODE	RES
FPSSPDIR	NEW	N/A	S/NODE	RES

As stated in Note 1 in the FN section, the MAPs and their CIs that were designed as part of this feature will not be delivered in CSP02. They have been documented here for reference only as to how the CI SHADOWUT might be replaced by DMS-standard MAPs in the future.

Accessing directory: FPSSDIR

To access

Enter

MAPCI; MTC; PM; POST FP n; SHADOWS

where n = 0–99.

To return to CI

Enter

QUIT ALL

Accessing directory: FPSSPDIR

.1To access

Enter

MAPCI; MTC; PM; POST FP n; SHADOWS; POSTDEV s d

or enter

MAPCI; MTC; PM; POST FP n; SHADOWS; POSTDEV ss_name

Here, s = 0–1, d = 0–5, and ss_name is a shadow-set name in the form of a string.

To return to CI

Enter

QUIT ALL

Commands**Table of New/modified commands****Table 2-108 Commands on SHADOWS and POSTDEV MAP Levels.**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
POSTDEV	NEW	N/A	FPSSDIR
TST	NEW	N/A	FPSSDIR
BSY	NEW	N/A	FPSSDIR
RTS	NEW	N/A	FPSSDIR
OFFL	NEW	N/A	FPSSDIR
QRYDEV	NEW	N/A	FPSSDIR
QRYSET	NEW	N/A	FPSSDIR
ABTK	NEW	N/A	FPSSDIR
POSTDEV	NEW	N/A	FPSSPDIR
NEXTDEV	NEW	N/A	FPSSPDIR
PREVDEV	NEW	N/A	FPSSPDIR
TST	NEW	N/A	FPSSPDIR
BSY	NEW	N/A	FPSSPDIR
RTS	NEW	N/A	FPSSPDIR
OFFL	NEW	N/A	FPSSPDIR
QRYDEV	NEW	N/A	FPSSPDIR
QRYSET	NEW	N/A	FPSSPDIR
ABTK	NEW	N/A	FPSSPDIR

MAP Level Postings

Figure 2-45 FP MAP Level Modified to Include SHADOWS Level.

```

+-----+
| CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      APPL      |
| .       Istb    AMA  P      .       PMLOAD  5  LKM      .       .       1 Maj      .       |
| Post                                         SysB      M      OffL      CBsy      M      InSv      |
| 0 Quit          PM          0          0          11          0          10          22      |
| 2 Post          FP          0          0          0          -          8          2       |
| 3 Plane                                         .      1SysB      |
| 4 Devices      FP 0:      FP0_R256      Plane      Devices      |
| 5 Shadows      InSv      .      |
| 6 Tst          PM:      |
| 7 Bsy          POST:      |
| 8 RTS      |
| 9 OffL      |
|10 LoadPM      |
|11 Disp_      |
|12 Next      |
|13      |
|14 QueryPM_      |
|15      |
|16      |
|17      |
|18      |
| TEAM12      |
|Time 12:27 >|
+-----+

```

Figure 2-46 New POSTDEV MAP Level for an Unshadowed Device.

```

+-----+
| CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      APPL      |
| .       01SBPT  AMA  P      .       PMLOAD  5  LKM      .       .       1 Maj      .       |
| PostDev                                         SysB      M      OffL      CBsy      M      InSv      |
| 0 Quit          PM          0          0          11          0          10          22      |
| 2 PostDev_      FP          0          0          0          -          8          2       |
| 3 NextDev                                         .      1SysB      |
| 4 PrevDev      FP 0:      FP0_R256      Plane      Devices      |
| 5              InSv      .      |
| 6 Tst          SCSI 0 DEV 0 M dk          SCSI 1 DEV 0 I UMBRA      25%      |
| 7 Bsy          1 S ct          |
| 8 RTS          2 M od          |
| 9 Offl          3 . UMBRA      Master          |
|10              4 . dk          |
|11              5 0 UMBRA          |
|12              |
|13 QryDev      SCSI Bus 0 Device 1 CT01      State SysB      ShSet -      |
|14 QrySet_      Shelf 2 Quad 1 Type DAT      Drive ON LINE      Sync      |
|15 POSTDEV:      |
|16      |
|17      |
|18      |
| TEAM12      |
|Time 12:34 >|
+-----+

```

Figure 2-47 New POSTDEV MAP Level for a Shadow-Set Member.

```

+-----+
| CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      APPL      |
| .      01SBPT  AMA  P      .      PMLoad  5  LKM      .      .      1  Maj      .      |
|-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| PostDev                                     SysB      ManB      OffL      CBsy      ISTb      InSv      |
| 0 Quit                                     0          0          11          0          10          22      |
| 2 PostDev_                               0          0          0          -          8          2      |
| 3 NextDev                                     |
| 4 PrevDev      FP 0:      FP0_R256      Plane      Devices      |
| 5 InSv                                     .      1SysB      |
| 6 Tst                                     |
| 7 Bsy          SCSI 0 DEV 0 M dk          SCSI 1 DEV 0 I UMBRA      25%      |
| 8 RT5          1 S ct          1 -          2 T SS00      Master      |
| 9 Offl         2 M od          3 0 mt          4 T MYSHADOW NoSync      |
| 10             3 . UMBRA      Master          5 . MYSHADOW Master      |
| 11             4 . dk          |
| 12             5 0 UMBRA      |
| 13 QryDev                                     |
| 14 QrySet      SCSI Bus 0 Device 3 DK03      State InSv      ShSet UMBRA      |
| 15 Shelf 3 Quad 0 Type DISK      Drive ON LINE      Sync MASTER      |
| 16 POSTDEV:                                     |
| 17 |
| 18 |
| TEAM12 |
| Time 12:34 > |
+-----+

```

MAP Level Query Displays

Figure 2-48 Display from SHADOWS::QRYSET ALL.

ShSet	State	Redundancy	Master SCSI	Master Device	Capacity Inuse
UMBRA	InSv	1/3	0	3	650M
SS00	ManB	0/1	1	2	1300M
MYSHADOW	InSv	1/2	1	5	50M

QRYSET:

Figure 2-49 Display from SHADOWS::QRYSET UMBRA.

SCSI Dev	State	Sync	Name	PEC	Quad	Shelf	Slot
0 3	InSv	MASTER	DK03	NT9X90AB	0	3	9
0 5	OffL	yes	DK05	NT9X90AB	3	4	11
1 0	ISTb	25% FSYNC	DK10	NT9X90AB	2	1	13

QRYSET:

Figure 2-50 Display from SHADOWS::QRYDEV ALL.

SCSI Dev	State	Name	Type	PEC	Quad	Shelf	Slot	ShSet	Sync
0 0	ManB	DK00	dk	NT9X90AB	1	2	14	-	
0 1	SysB	CT01	ct	NT9X90CT	1	2	14	-	
0 2	ManB	OD02	od	NT9X90OD	1	2	14	-	
0 3	InSv	DK03	dk	NT9X90AB	0	3	9	UMBRA	MASTER
0 4	InSv	DK04	dk	NT9X90AB	0	3	9	-	
0 5	OffL	DK05	dk	NT9X90AB	3	4	11	UMBRA	yes
1 0	ISTb	DK10	dk	NT9X90AB	2	1	13	UMBRA	25% FSYNC
1 2	ManB	DK12	dk	NT9X90AA	2	1	13	SS00	MASTER
1 3	OffL	MT13	mt	NT9X90MT	2	1	13	-	
1 4	ManB	DK14	dk	NT9X90AA	2	1	13	MYSHADOW	no
1 5	InSv	DK15	dk	NT9X90AA	2	1	13	MYSHADOW	MASTER

QRYDEV:

CH	MS	ID0	Net	PM	DCS	Line	Trks	Ext	APPL
	0130PT	RNA		PMLOAD	5	LNK		1 Maj	
Shadow				SysB	ManB	DPPL	CBay	15th	InSw
0 Quit				0	0	11	0	10	22
2 PostDev	PM			0	0	0	-	B	2
3									
4	TP Q:	TPQ_R236		Plane	Devices				
5	InSw				ISysB				
6 Yait									
7 Bay	SCSI 0 DEV	0 N dk			SCSI 1 DEV	0 I UNBRA	25K		
8 RTS		1 S ct				1 -			
9 Offl		2 N cd				2 T 5900	Master		
10		3 UNBRA	Master			3 0 mt			
11		4 dk				4 T MYSHADOW	McSync		
12		5 UNBRA				5 MYSHADOW	Master		
13 QryDev	SHADOWS:								
14 QrySet									
15									
16									
17									
18									
TEAM12									
Time 12:34									

Figure 2-51 Display from SHADOWS::QRYDEV 0 1.

SCSI Dev	State	Name	Type	PEC	Quad Shelf Slot	ShSet	Sync
0 1	SysB	CT01	ct	NT9X90CT	1 2 14	-	
QRYDEV:							

Maintenance Administration Position (MAP)

Two new MAP levels will be introduced by this feature to allow the craft to manipulate shadow sets and other devices on an FP. (Currently, Disk Shadowing handles only shadow sets on FP disks.) The first MAP level called SHADOWS for shadow-set maintenance will be a sub-level of the FP MAP level. From this MAP, the craft can monitor the behaviour of all shadow sets and physical devices on the FP. The second MAP level called POSTDEV will allow a specific device to be monitored. POSTDEV will be a sub-level of the SHADOWS level. To eliminate any confusion with the POSTDEV of the DEVICES level, we will use POSTDEV to mean the SHADOWS::POSTDEV level and qualify via DEVICES::POSTDEV that of the DEVICES level.

From neither the SHADOWS nor the POSTDEV levels will the craft be able to monitor the statuses of SCSI hardware, such as DABMs, SIPs, and SDIPs, nor will they be able to execute a SWEN. These operations are and will continue to be available through the DEVICES level.

The SHADOWS level will hook into generic, MAP software as an optional command, exactly as the DEVICES level. When an AP is posted, the PM command menu does not include the DEVICES command, and the MAP layout does not include the DEVICES alarm. Similarly, the SHADOWS command will not be displayed for APs.

The SHADOWS level is different enough from the DEVICES level in its display layout—illustrated ahead—treatment of shadow sets and their members, and non-treatment of SCSI hardware to warrant a separate level. To avoid the craft having to flip back and forth between the SHADOWS and DEVICES::POSTDEV levels for member operations, a POSTDEV level is useful.

Device State

The device-status indicators used by the SHADOWS and POSTDEV levels are exactly those used by the DEVICES MAP level. The state of a device can be determined by looking up its SCSI and device numbers in the matrix shown at the SHADOWS level.

Member State

The state of a shadow-set member is twofold:

- (Physical) device state. This has been explained earlier.
- Synchronization status: with respect to the master—the original copy—

Table 2-109 Synchronization-Status Values.

SHADOWS Level	POSTDEV Level	Meaning
Master	Master	Member is the master, and hence, is synchronized.
n%	nn% FSync	Member is being fully synchronized, i.e., an entire disk is being copied onto the member. So far, nn% has been carried out.
TSync	TSync	Member is being synchronized using a table that has tracked the differences from the master.
NoSync	no	Member is neither synchronized nor being synchronized.
	yes	Member is synchronized.

- of the shadow set. This status is shown to the right of the (physical) device state on the SCSI-device matrix at the SHADOWS level and in a field labelled SYNC at the POSTDEV level for the member. The values shown for synchronization status at the SHADOWS level are slightly

different from those shown at the POSTDEV level. These differences have been tabulated earlier. The operations QRYSET and QRYDEV for querying information about shadow sets and physical devices use the POSTDEV-level values for showing synchronization status.

Shadow-Set State

The state of a shadow set is the (physical) device state of its master. A shadow set's synchronization status is measured in its redundancy and in the individual, synchronization statuses of its members.

Redundancy is a measure of the fault tolerance of a shadow set and is a ratio of members that are synchronized and available—either InSv or ISTb—to File Management and other users versus the total members in the set. In a shadow set of 'm' members, if 'n' members are available and synchronized with the master, redundancy is shown as 'n/m'. This means that the minimum redundancy is '0/m'—possible when the master is unavailable—and the maximum redundancy is 'm/m'. Note that a write to a shadow set cannot—modulo transients during a write—put InSv members out of synchronization, but can unsynchronize a synchronized member that is out of service, e.g., ManB, SysB, or OffL, since Disk Shadowing does not immediately propagate writes to out-of-service members. Note also that a member might go SysB on encountering a critical fault and yet stay synchronized. Redundancy can be queried using a QRYSET command, which will be explained ahead. The redundancy-change logs currently output by Disk Shadowing will need to be updated to follow the stated definition of redundancy.

Sometimes, a device state shows up as "T" or "R" to indicate that the device is being tested or is resource busy. As defined in feature AL1167, these are only traits which really accompany device states, such as "M," that are not displayed in such situations. So, if a master's state shows up as "T," it does not mean that the shadow set is being tested, but that the master device is being tested.

Description of Fields

There are two columns in the SHADOWS-level display, one for (devices on) each SCSI bus. Following is the format in which fields are displayed at the SHADOWS level:

Table 2-110Device-Information Format at SHADOWS-Level.

device_number	device_state	device_type_or_set_name	sync_status

0–5	State: {.,I,M,S,O,—} Trait: {T,R}	{dk,ct,mt,od} or 8-character, alphanumeric string	{Master,n%,T Sync,NoSync, }
Particular device on the SCSI bus.	(Physical) device state.	Device type—in lower case—if the device is unshadowed, and shadow-set name—in upper case—otherwise.	Synchronizati on status if the device is a member.

In addition, the first row presents the SCSI-bus number to the left of the device information:

SCSI	scsi_bus_number	DEV
N/A	0–1	N/A
Keyword indicating that scsi_bus_number follows.	SCSI bus where the device posted to the right is located.	Keyword indicating that device information follows.

At the POSTDEV level, following are the fields that appear:

Table 2-111 Fields at POSTDEV Level.

Field Label	Range	Length	Description
SCSI Bus	0–1	2	SCSI bus.
Device	0–5	2	Device number on the SCSI bus.
	4-character, alphanumeric string	8	Device name.
State	{InSv, ISTb, ManB, SysB, OffL, UnEq} with possibly one of {/MTCE, (NA), (RU), FLT}	10	(Physical) device state.
Drive	{IDLE, MOUNTED, DISCONNECTED, UNKNOWN, ON LINE, SPINNING}	12	Individual state of the drive.
Shelf	0–3	2	Device's shelf number within its frame.
Quad	0–3	2	Device's quadrant number on shelf.
Set	8-character, alphanumeric string or '—'	8	Name of posted device's shadow set, if applicable, and '—' otherwise.
Type	{DISK, DAT, MAG TAPE, OPT DISK}	8	Device type.

Table 2-111 Fields at POSTDEV Level.

Field Label	Range	Length	Description
Sync	{Master, nn% FSync, TSync, no, yes} or blank	9	Synchronization status of device if it is a member; blank otherwise.

Command name: POSTDEV**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command posts one physical device on a SCSI bus. It can also be made to select devices that have the same (physical) state, type, or encompassing, shadow set and to post the first among them. (“First,” “next,” and “previous” is decided by the ordering of devices according to their SCSI numbers and then their device numbers.) From the POSTDEV level, the selected devices can later be posted using the commands NEXTDEV and PREVDEV or acted upon by commands TST, BSY, RTS, and OffL using the SET option. The query commands are unaware of these selected devices. The MAP display when a POSTDEV command is executed has been shown earlier.

Warning

N/A

Command syntax

To post a specific device, enter

```
POSTDEV scsi_bus_number device_number
```

To select devices of the same, shadow set or device type and to post the first among them, use the following syntax:

```
POSTDEV { shadow_set_name,
          STATE device_state,
```

TYPE device_type }

Parameter definitions

Table 2-112POSTDEV Parameters.

PARAMETER	VALUE	DEFINITION
scsi_bus_number	0–1	SCSI bus where the device to be posted is located.
device_number	0–5	Particular device on the SCSI bus to be posted.
shadow_set_name	string, but not “ALL”	Shadow set whose members are to be selected.
STATE	N/A	Requirement that all devices matching the following device_state be selected.
device_state	{.,I,S,M,O}	(Physical) device's state.
TYPE	N/A	Requirement that all of the devices matching the following device_type be selected.
device_type	{dk,ct,mt,od}	Type of devices to be selected.

Command name: TST

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command tests one physical device on a SCSI bus. Although this command is available at the SHADOWS level, it is meaningless for an entire shadow set.

Warning

N/A

Command syntax

To test a specific device from the SHADOWS level, enter

```
TST [ DEV ] scsi_bus_number device_number
```

From the POSTDEV level, to test all of the devices currently posted, following is the syntax:

```
TST [ SET ]
```

Parameter definitions

Table 2-113TST Parameters.

PARAMETER	VALUE	DEFINITION
DEV	N/A	This just specifies that the two, following parameters decide a specific device.
scsi_bus_number	0–1	SCSI bus where the device to be tested is located.
device_number	0–5	The particular device on the SCSI bus to be tested.
SET	N/A	The requirement that the posted set of devices be tested.

Command name: BSY

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Given a physical device on a SCSI bus, this command busies it. Given a shadow-set name, it initiates the busying of all members of the set. From the POSTDEV level, it can busy the posted device or all the devices selected by a previously-executed POSTDEV.

Warning

N/A

Command syntax

If a device is to be busied from the SHADOWS level, enter

BSY [DEV] scsi_bus_number device_number [FORCE]

From the POSTDEV level, to busy the posted device or all of the devices selected by a previously-executed, POSTDEV command, use the following syntax:

BSY [{ SET, FORCE }]

For initiating the busying of an entire shadow set, enter

BSY shadow_set_name [FORCE]

Parameter definitions

Table 2-114BSY Parameters.

PARAMETER	VALUE	DEFINITION
DEV	N/A	This just specifies that the two, following parameters decide a specific device.
scsi_bus_number	0–1	SCSI bus where the device to be busied is located.
device_number	0–5	The particular device on the SCSI bus to be busied.
shadow_set_name	string	The shadow set whose members are to be busied.
SET	N/A	The requirement that the posted set of devices be busied.
FORCE	N/A	This indicates that the specified devices or shadow set's members have to be forced into ManB state, regardless of errors encountered.

Command name: RTS

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Given a physical device on a SCSI bus, this command returns the device to service. If the device is a member, it initiates the member's synchronization with the master, if need be. From the POSTDEV level, it can return to service the posted device or all of the devices selected by the previously-executed POSTDEV. Given a shadow-set name, it initiates the RTSing of all members of the set and tries to synchronize them with the master, if need be. Note that even if all the members are in InSv state, it is possible that the RTS of the shadow set is not completed.

The “fastest, necessary” synchronization is the default: members are synchronized only if necessary after being brought into InSv state. This corresponds to the RECOVER default of SHADOWUT.

Warning

N/A

Command syntax

From the POSTDEV level, to return a posted device or all the devices selected by the previously-executed, POSTDEV command, use the following syntax:

```
RTS [{ SET, FORCE }]
```

To return a device to service from the SHADOWS level, following is the command syntax:

```
RTS [ DEV ] scsi_bus_number device_number
```

```
[{ INSVSYNC, NODKCHECK, FORCE }]
```

The optional parameters INSVSYNC and NODKCHECK are valid only if the device is a member of a shadow set.

From either level, to return an entire shadow set to service, following is the command syntax:

```
RTS shadow_set_name
```

```
[{ NEWMAST scsi_bus_number device_number,
```

```
MANBSYNC, INSVSYNC, NODKCHECK, FORCE }]
```

Parameter definitions

Table 2-115RTS Parameters.

PARAMETER	VALUE	DEFINITION
DEV	N/A	This just indicates that the two, following parameters decide a specific device.
scsi_bus_number	0–1	SCSI bus where the device to be brought into service is located.
device_number	0–5	The particular device on the SCSI bus to be brought into service.
shadow_set_name	string	The shadow set whose members are to be brought into service.
NEWMAST	N/A	The requirement that the member specified by the following scsi_bus_number and device_number be used as the new master of the shadow set.
MANBSYNC	N/A	The requirement that members be fully synchronized before being brought into InSv state.
INSVSYNC	N/A	The requirement that members be fully synchronized after being brought into InSv state.
NODKCHECK	N/A	The requirement that physical replacement of member disks not be checked for when deciding whether to synchronize members. This is the FORCE option of SHADOWUT.
SET	N/A	The requirement that the posted set of devices be returned to service.
FORCE	N/A	This indicates that the specified device or shadow set's members have to be forced into InSv state, regardless of errors encountered.

Command name: OFFL

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Given a physical device on a SCSI bus, this command offlines it. Given a shadow-set name, it initiates the offlining of all members of the set. From the POSTDEV level, it can offline the posted device or all the devices selected by the previously-executed, POSTDEV command.

Warning

N/A

Command syntax

If a device is to be offlined from the SHADOWS level, enter

```
OFFL [ DEV ] scsi_bus_number device_number [ FORCE ]
```

From the POSTDEV level, to offline the posted device or all the devices selected by the previously-executed, POSTDEV command, use the following syntax:

```
OFFL [{ SET, FORCE }]
```

For initiating the offline of an entire shadow set, enter

```
OFFL shadow_set_name [ FORCE ]
```

Parameter definitions

Table 2-116OFFL Parameters.

PARAMETER	VALUE	DEFINITION
DEV	N/A	This just indicates that the two, following parameters decide a specific device.
scsi_bus_number	0–1	SCSI bus where the device to be offlined is located.
device_number	0–5	The particular device on the SCSI bus to be offlined.
shadow_set_name	string	The shadow set whose members are to be offlined.
SET	N/A	The requirement that the posted set of devices be offlined.
FORCE	N/A	This indicates that the specified device or shadow set's members have to be forced into OffL state, regardless of errors encountered.

Command name: QRYDEV**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Given a physical device, this command displays state and configuration information about it. Given a SCSI bus, it displays information about all the devices on the bus.

Warning

N/A

Command syntax

From either the SHADOWS or the POSTDEV level, to view information about devices, following is the syntax:

```
QRYDEV { scsi_bus_number, ALL }  
      { device_number, ALL }  
      [{ TYPE device_type }]
```

If the device has been posted at the POSTDEV level, enter the shorter

```
QRYDEV
```

From either level, to view information about all the devices, enter

```
QRYDEV ALL
```

Parameter definitions

Table 2-117 QRYDEV Parameters.

PARAMETER	VALUE	DEFINITION
scsi_bus_number	0–1	The SCSI bus.
device_number	0–5	The particular device on the SCSI bus.
ALL	N/A	The requirement that information about all devices matching the other constraints be displayed.
TYPE	N/A	The requirement that the devices should be of the following device_type.
device_type	{dk,ct,mt,od}	The type of the devices to be selected.

Command name: QRYSET

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Given a shadow-set name, this command displays state and configuration information about it.

Warning

N/A

Command syntax

From either the SHADOWS or the POSTDEV level, to view information about a shadow set, enter

QRYSET shadow_set_name

From either level, to view information about all shadow sets on the FP, enter

QRYSET ALL

If a member has been posted at the POSTDEV level, then to view information about its shadow set, just enter

QRYSET

Parameter definitions

Table 2-118QRYSET Parameters.

PARAMETER	VALUE	DEFINITION
ALL	N/A	The requirement that information about all devices be displayed.
shadow_set_name	string	The shadow set to be queried.

Command name: NEXTDEV

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Assume devices are ordered by their SCSI numbers, and that those with the same SCSI number are ordered by their device numbers. This command posts the next device in the sequence of devices selected by a previously-executed, POSTDEV command. It overwrites the previously-posted, device information.

Warning

N/A

Command syntax

From the POSTDEV level, enter

NEXTDEV

Parameter definitions

This command takes no parameters.

Command name: PREVDEV**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

Assume devices are ordered by their SCSI numbers, and that those with the same SCSI number are ordered by their device numbers. This command posts the previous device in the sequence of devices selected by a previously-executed, POSTDEV command. It overwrites the previously-posted, device information.

Warning

N/A

Command syntax

From the POSTDEV level, enter

PREVDEV

Parameter definitions

This command takes no parameters.

Command name: ABTK**Command type**

UNLISTED MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command aborts all Device-Maintenance or Disk-Shadowing commands issued previously on the FP. ABTK aborts commands issued from other MAP terminals as well.

Warning

N/A

Command syntax

From either the SHADOWS or the POSTDEV level, to abort ongoing maintenance on the FP, enter

ABTK

Parameter definitions

This command takes no parameters.

Semantics

The meaning of operations on and the state transitions of unshadowed devices have been detailed in documents AL1391 and AL1167. We need to discuss here only the operations on shadow-set members.

If an operation is applied to a shadow set by name, it succeeds if it succeeds on the master and fails otherwise. If the operation is applied to a “mere” collection of members and unshadowed devices, it succeeds if each device reaches the desired state and fails otherwise. Regardless of what it is applied to, if an operation succeeds, it will report each device that did not change state as desired.

To understand how a state change is carried out, suppose a BSY, RTS, or OFFL is applied to a subset of a shadow set’s members. These operations are “optimistic” in that they will be applied to as many target devices as possible in spite of guaranteed failure—as defined earlier—in the end. For these operations, the following rules that will be applied by Disk Shadowing provides a rough semantics:

-
- Members that are more than a transition away from the desired (physical) state are left untouched. For example, an RTS on a shadow set with an OffL member will leave the member OffL.
 - TST operates on physical devices, irrespective of whether they are shadowed, and not on shadow sets. So, it is explained by the device-state transitions in AL1391.
 - BSY and OFFL are applied to each member in the subset in random order. (In order to prevent a cascade of mastership transfers, should a service-degrading operation, e.g., InSv to ManB, be applied to masters last and a service-improving operation be applied to masters first?) A pre-condition for OFFL on a shadow set by name is that each member be at most a transition away.
 - RTS is first attempted on the master if it is in the subset. If the master becomes InSv or ISTb, the operation is continued on the remainder of the subset. Otherwise, mastership is to be transferred to a *candidate* member, which is a member that is synchronized with the master and is preferably InSv or ISTb. (The latter condition is to prove that the candidate can be brought into service.) Now, the following outcomes are possible:
 - **InSv or ISTb Candidate.** The operation is continued on the remainder of the subset.
 - **ManB or SysB candidate that belongs to the subset.** The candidate is made the master, and RTS is re-applied to the subset.
 - **Otherwise.** All the shadow-set's members are taken off the subset since they cannot be RTSed, and the operation continues on the remainder.

If no master is left in the subset, RTS of each non-master member in the remainder of the subset will be attempted. Then, the operation stops.

The effect of datafill changes and power outages during these operations will be carefully considered in the DD section of this document.

Responses

Responses displayed on the SHADOWS MAP are being based on responses from SHADOWUT and from the DEVICES MAP level. The latter responses are detailed in the references towards the end of this document. The MAP displays and postings got by executing the menu commands are illustrated with examples ahead in this MM section.

For each response, a response identifier will prefix the response string. The response identifier is “FP *n* <*command*>” where *n* is the FP number and <*command*> is the fully-expanded command that is being responded to. The expansion fills in parameters omitted by the issuer, e.g., by supplying the device’s SCSI-bus and device numbers when just a parameter-less “BSY” is issued from the POSTDEV level. The response-identifier format helps the craft associate responses with commands issued, especially since responses might come out of order when commands are issued with the NOWAIT option. (This option is briefly described ahead.) Following are the generic, response strings:

Response 1

“Command passed.”

Explanation:

This response is visible only on the Supernode and indicates that the command has successfully completed.

System action:

N/A

User action:

N/A

Response 2

“Command has been submitted.”

Explanation:

This response is visible only on the Supernode and indicates that the request has been received at the PM.

System action:

On the PM, Shadowing or FP Maintenance will continue executing the command and display a response message upon completion.

User action:

The user may continue issuing commands from the MAP without waiting for this command to complete since she issued this command with the NOWAIT option. (The NOWAIT option is described ahead.)

Response 3

“Command failed: PM is not responding. Retry later.”

Explanation:

Either Shadowing Maintenance did not receive the request—due to the node being NA or due to message loss—or it did not respond to it within an expected time. This response is visible only on the Supernode.

System action:

N/A

User action:

The user should check for any logs (?###) and may retry the command later after ensuring that the node is not NA.

Response 4

“Command failed: device is not ManB. BSY the device first.”

Explanation:

This response is visible only on the Supernode and appears when an command, e.g., RTS or OFFL, that requires the device to be ManB is attempted on a non-ManB device.

System action:

N/A

User action:

The user may busy the device and retry the command.

Response 5

“Command failed: shadow set is not ManB. BSY the shadow set first.”

Explanation:

This response is visible only on the Supernode and appears when an command, e.g., RTS or OFFL, that requires the shadow set to be ManB is attempted on a non-ManB, shadow set.

System action:

N/A

User action:

The user may busy the shadow set and retry the command.

Response 6

“Command failed: device is not datafilled.”

Explanation:

This response is visible only on the Supernode and appears when an operation is attempted on an undatafilled device.

System action:

N/A

User action:

The user may datafill the device and retry the command or check if she intended to apply it to another device.

Response 7

“Command failed: shadow set is not datafilled.”

Explanation:

This response is visible only on the Supernode and appears when a command is attempted on an undatafilled, shadow set.

System action:

N/A

User action:

The user may datafill the shadow set and retry the command or check if she intended to apply it to another shadow set..

Response 8

“Command failed: device is not datafilled as a shadow-set member.”

Explanation:

This response is visible only on the Supernode and appears when a Shadowing-specific operation, e.g., RTS MANBSYNC, is attempted on an unshadowed device.

System action:

N/A

User action:

The user may datafill the device as a shadow-set member and retry the command or check if she intended to apply it to another device or another command option.

Response 9

“Command failed: maintenance is in progress. Retry later.”

Explanation:

This response is visible only on the Supernode and appears when the resources, such as devices or shadow sets, to be acted upon are undergoing another operation. For example, a member to be acted upon might be synchronizing with the master. The response can appear for an ABTK only if another ABTK is going on on the same node.

System action:

N/A

User action:

The user may consult the status of the devices or shadow sets from the MAP for any visible signs of maintenance activity and retry the command later. If unwilling to await completion of maintenance, the user may, in critical cases, issue an ABTK, which would abort all maintenance activity on the node.

Response 10

“Command failed: PM is undergoing a software upgrade. Retry later.”

Explanation:

This response is visible only on the Supernode and appears when the node is undergoing a Cold-SWACT, BCS application or an NRU.

System action

: N/A

User action:

The user may retry the command after the PM is upgraded. If unwilling to let the upgrade complete, the user may, in critical cases, issue an ABTK.

Response 11

“Command failed: ABTK is in progress. Retry later.”

Explanation:

This response is visible only on the Supernode and appears when the node is undergoing an ABTK.

System action:

N/A

User action:

The user may retry the command after the ABTK completes.

Response 12

“Command warning: RTS disks soon after if you physically move them into or out of a shadow set; otherwise, shadow sets might get corrupted.”

Explanation:

This response is visible only on the Supernode, appears when members or shadow sets are offlined, and warns the user to rectify any stale, Shadowing-control information that is stored on disks as soon as the information becomes stale. Stale information on disks can hamper shadow-set recovery, e.g., when an FP loses power.

System action:

N/A

User action:

The user must obey the warning or keep track of the physically-replaced disks so as to be in a position to correctly pick a master in case Shadowing picks a wrong one on recovery after an outage.

Notes

To allow parallel, command processing, the following options may be specified with each of the TST, BSY, RTS, OFFL, QRYSET, and QRYDEV commands described earlier:

Option	Description
NOWAIT or WAIT	Indicates whether the user wishes to free up the terminal or wait while the command is executing.
REPLY or NOREPLY	Indicates whether the user desires a response from the command's execution.
PROMPT or NOPROMPT	Indicates whether the user wishes prompting messages to be displayed. Response to all prompts defaults to “Yes.” The default option is PROMPT.

Where unspecified, the defaults for these options will be chosen appropriately based on the operation requested and whether the target is a collection of members and other devices or a single device?###

Examples

Assume we are at the following (modified) FP level.

Figure 2-52FP MAP Level Modified to Include SHADOWS Level.

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	Istb	AMA P	.	PMLOAD	5 LKM	.	.	1 Maj	.
Post				SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM		0	0	11	0	10	22
2 Post		FP		0	0	0	-	8	2
3 Plane									
4 Devices	FP 0:		FP0_R256	Plane	Devices				
5 Shadows	InSv			.	1SysB				
6 Tst	PM:								
7 Bsy	POST:								
8 RTS									
9 OffL									
10 LoadPM									
11 Disp_									
12 Next									
13									
14 QueryPM_									
15									
16									
17									
18									
TEAM12									
Time 12:27									

We can reach the following SHADOWS MAP level by entering

SHADOWS

Figure 2-53Example SHADOWS MAP Level.

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	01SBPT	AMA P	.	PMLOAD	5 LKM	.	.	1 Maj	.
Shadows				SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM		0	0	11	0	10	22
2 PostDev_		FP		0	0	0	-	8	2
3									
4	FP 0:		FP0_R256	Plane	Devices				
5	InSv			.	1SysB				
6 Tst_									
7 Bsy_	SCSI 0 DEV	0 M dk				SCSI 1 DEV	0 I UMBRA	25%	
8 RTS_		1 S ct					1 -		
9 OffL_		2 M od					2 T SS00	Master	
10		3 . UMBRA	Master				3 0 mt		
11		4 . dk					4 T MYSHADOW	NoSync	
12		5 0 UMBRA					5 . MYSHADOW	Master	
13 QryDev_	SHADOWS:								
14 QrySet_									
15									
16									
17									
18									
TEAM12									
Time 12:34									

To test device 3 on SCSI bus 0 when at the SHADOWS level, enter

TST 0 3

To busy device 3 on SCSI bus 0 from the SHADOWS level, enter

BSY 0 3

To post device 1 on SCSI bus 0, which happens to be an unshadowed device, enter the following command:

POSTDEV 0 1

Figure 2-54SHADOWS:POSTDEV MAP Level for an Unshadowed Device.

```

+-----+
| CM      MS      IDD      Net      PM      CCS      Lns      Trks      Ext      APPL      |
| .        01SBPT  AMA  P      .      PMLoad  5  LKM      .        .        1 Maj      .      |
| |        |        |        |        |        |        |        |        |        |        |        |
| PostDev |        |        |        |        |        |        |        |        |        |        |
| 0 Quit  |        |        |        |        |        |        |        |        |        |        |
| 2 PostDev_ |        |        |        |        |        |        |        |        |        |        |
| 3 NextDev |        |        |        |        |        |        |        |        |        |        |
| 4 PrevDev |        |        |        |        |        |        |        |        |        |        |
| 5        |        |        |        |        |        |        |        |        |        |        |
| 6 Tst    |        |        |        |        |        |        |        |        |        |        |
| 7 Bsy     |        |        |        |        |        |        |        |        |        |        |
| 8 RTS     |        |        |        |        |        |        |        |        |        |        |
| 9 Offl    |        |        |        |        |        |        |        |        |        |        |
|10         |        |        |        |        |        |        |        |        |        |        |
|11         |        |        |        |        |        |        |        |        |        |        |
|12         |        |        |        |        |        |        |        |        |        |        |
|13 QryDev  |        |        |        |        |        |        |        |        |        |        |
|14 QrySet_ |        |        |        |        |        |        |        |        |        |        |
|15         |        |        |        |        |        |        |        |        |        |        |
|16         |        |        |        |        |        |        |        |        |        |        |
|17         |        |        |        |        |        |        |        |        |        |        |
|18         |        |        |        |        |        |        |        |        |        |        |
| TEAM12   |        |        |        |        |        |        |        |        |        |        |
| Time 12:34 >|
+-----+

```

To post device 3 on SCSI bus 0, which is a member of shadow set UMBRA, enter

POSTDEV 0 3

Figure 2-55POSTDEV MAP Level for a Shadow-Set Member.

```

+-----+
| CM      MS      IDD      Net      PM      CCS      Lns      Trks      Ext      APPL      |
| .        01SBPT  AMA  P      .      PMLoad  5  LKM      .        .        1 Maj      .      |
| |        |        |        |        |        |        |        |        |        |        |
| PostDev |        |        |        |        |        |        |        |        |        |        |
| 0 Quit  |        |        |        |        |        |        |        |        |        |        |
| 2 PostDev_ |        |        |        |        |        |        |        |        |        |        |
| 3 NextDev |        |        |        |        |        |        |        |        |        |        |
| 4 PrevDev |        |        |        |        |        |        |        |        |        |        |
| 5        |        |        |        |        |        |        |        |        |        |        |
| 6 Tst    |        |        |        |        |        |        |        |        |        |        |
| 7 Bsy     |        |        |        |        |        |        |        |        |        |        |
| 8 RTS     |        |        |        |        |        |        |        |        |        |        |
| 9 Offl    |        |        |        |        |        |        |        |        |        |        |
|10         |        |        |        |        |        |        |        |        |        |        |
|11         |        |        |        |        |        |        |        |        |        |        |
|12         |        |        |        |        |        |        |        |        |        |        |
|13 QryDev  |        |        |        |        |        |        |        |        |        |        |
|14 QrySet_ |        |        |        |        |        |        |        |        |        |        |
|15         |        |        |        |        |        |        |        |        |        |        |
|16         |        |        |        |        |        |        |        |        |        |        |
|17         |        |        |        |        |        |        |        |        |        |        |
|18         |        |        |        |        |        |        |        |        |        |        |
| TEAM12   |        |        |        |        |        |        |        |        |        |        |
| Time 12:34 >|
+-----+

```

To test a device that has been posted using POSTDEV, enter the following command:

TST

To display information about shadow set UMBRA, enter

QRYSET UMBRA

Figure 2-56 Display from SHADOWS::QRYSET UMBRA.

SCSI	Dev	State	Sync	Name	PEC	Quad	Shelf	Slot
0	3	InSv	MASTER	DK03	NT9X90AB	0	3	9
0	5	OffL	yes	DK05	NT9X90AB	3	4	11
1	0	ISTb	25% FSYNC	DK10	NT9X90AB	2	1	13

QRYSET;

To display information about all shadow sets on the FP, enter

QRYSET ALL

Figure 2-57 Display from SHADOWS::QRYSET ALL.

ShSet	State	Redundancy	Master SCSI	Master Device	Capacity Inuse
UMBRA	InSv	1/3	0	3	650M
SS00	ManB	0/1	1	2	1300M
MYSHADOW	InSv	1/2	1	5	50M

QRYSET;

To display information about all the devices on the FP, enter

QRYDEV ALL

Figure 2-58 Display from SHADOWS::QRYDEV ALL.

SCSI	State	Name	Type	PEC	Quad	Shelf	ShSet	Sync
Dev						Slot		
0 0	ManB	DK00	dk	NT9X90AB	1 2	14	-	
0 1	SysB	CT01	ct	NT9X90CT	1 2	14	-	
0 2	ManB	OD02	od	NT9X90OD	1 2	14	-	
0 3	InSv	DK03	dk	NT9X90AB	0 3	9	UMBRA	MASTER
0 4	InSv	DK04	dk	NT9X90AB	0 3	9	-	
0 5	OffL	DK05	dk	NT9X90AB	3 4	11	UMBRA	yes
1 0	ISTb	DK10	dk	NT9X90AB	2 1	13	UMBRA	25% FSYNC
1 2	ManB	DK12	dk	NT9X90AA	2 1	13	SS00	MASTER
1 3	OffL	MT13	mt	NT9X90MT	2 1	13	-	
1 4	ManB	DK14	dk	NT9X90AA	2 1	13	MYSHADOW	no
1 5	InSv	DK15	dk	NT9X90AA	2 1	13	MYSHADOW	MASTER

QRYDEV;

To display information about a specific device 1 on SCSI bus 0, enter

QRYDEV 0 1

Figure 2-59Display from SHADOWS::QRYDEV 0 1.

SCSI Dev	State	Name	Type	PEC	Quad	Shelf	ShSet	Sync
Slot								
0 1	SysB	CT01	ct	NT9X90CT	1	2	14	-

QRYDEV:

Alarms

No new alarms are being provided. Individual devices have to be monitored closely, unlike shadow sets, and the DEVICES level already provides an alarm for FP devices.

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AR0523mm.ab03

Directories

Table of new/modified directories

Table 2-119: Modified directory.

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
NIUDVCI	CHANGED	N/A	SUPERNODE	RES

Accessing directory: NIUDVCI

To access

Enter the following from the CI prompt:

- MAPCI;MTC;PM;POST <NIUs to be posted>;DEVICES

To return to CI

Enter the following from the NIU Devices MAP level:

- QUIT;QUIT;QUIT;QUIT;QUIT

or

- QUIT ALL

Note that if “QUIT ALL” is used, all other active directories are also left.

Commands

Table of New/modified commands

Table 2-120 : New commands of the NIUDVCI MAP level.

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
BSYLNKS	NEW	N/A	NIUDVCI
RTSLNKS	NEW	N/A	NIUDVCI

Command name: BsyLnks**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The command is used to manually P-side busy the DS-30 links terminating on the inactive NIU unit DS-30 link PB (NTEX28AA).

Warning

All services provided by the NIU can be affected by the BsyLnks command. When a BsyLnks command is issued a warning message appears on the screen if the requested action has an impact on service. The user has the choice to proceed or not. The NOPROMPT and FORCE options should be used carefully because they eliminate all prompts to the user and make the BsyLnks command proceed by default.

Command syntax

BsyLnks: P-side busy PB links on the posted node.

Parms: <Busy links What?>{ PB <paddle board number> {0 TO 1},

INACTIVE }

[<Force Option>{ FORCE }]

[<Prompt Option>{ NOPROMPT }]

[<Options>{ NOWAIT,
NOREPLY }]

Parameter definitions

Table 2-121 : Parameters used with the BsyLnks command.

PARAMETER	VALUE	DEFINITION
PB	N/A	Not optional. Indicates that a particular paddle board links are to be P-side busied.
paddle board number	0, 1	Not optional. Specifies which paddle board links are to be P-side busied.
INACTIVE	N/A	Not optional. Indicates that the inactive NIU UNIT paddle board links are to be P-side busied.
FORCE	N/A	Optional Indicates that the user wishes to take out of service the paddle board links despite a possible impact on service.
NOPROMPT	N/A	Optional. Indicates that the user does not wish to respond to any prompts. The response to all prompts defaults to "YES".
NOWAIT	N/A	Optional. Indicates that the user does not want to wait in-line while the command is being executed.
NOREPLY	N/A	Optional. Indicates that the user does not want any textual responses to the command.

Responses

Before the BsyLnks request is initiated on the inactive NIU unit paddle board, an assessment of the impact of the BsyLnks is made. If there is a service-affecting impact, it is displayed and the user is prompted to continue or abort the request. The possible impacts are shown below as examples.

Response 1

BsyLnks could take traffic down on the following:

<list of affected ASUs>

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

This warning message indicates that the BsyLnks request will take traffic down on all the listed nodes.

System action

Wait for input from prompt.

User action

If a BsyLnks action is desired then enter “Yes”, and the command will continue. Otherwise, enter “No” and the command will terminate. This can be bypassed by using the FORCE or NOPROMPT options.

Response 2

A bad impact assessment was received. Do you wish to proceed?

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

An unexpected impact query response was received. The impact on service of the BsyLnks request is not known.

System action

Wait for input from prompt.

User action

If a BsyLnks action is desired then enter “Yes”, and the command will continue. Otherwise, enter “No” and the command will terminate. This can be bypassed by using the FORCE or NOPROMPT options.

Response 3

WARNING An assessment of the impact of the command cannot be made. Do you wish to proceed?

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

The maintenance system is not able to determine if the BsyLnks request will affect service.

System action

Wait for input from prompt.

User action

If a BsyLnks action is desired then enter “Yes” and the command will continue. Otherwise, enter “No” and the command will terminate. This can be bypassed by using the FORCE or NOPROMPT options.

Response 4

Command completed.

Explanation

The four paddle board network links have been P-side busied.

System action

N/A

User action

N/A

Response 5

Link <0 to 7> is already P-busy.

Command completed.

Explanation

No need to execute the BsyLnks command on the link indicated as the paddle board link was already in a P-side busy state.

System action

N/A

User action

N/A

Response 6

Link <0 to 7> will remain <C-busy, MBusy, SBusy, or Offl >.

Command completed.

Explanation

No need to execute the BsyLnks command on the link indicated as the paddle board link was already in an out-of-service state.

System action

N/A

User action

N/A

Response 7

Command rejected. NIU <niu_number> unit <0 or 1> is ACTIVE.

Explanation

The paddle board links cannot be put in P-side busy (PBsy) state if the PB belongs to the active NIU unit.

System action

N/A

User action

Initiate a SWACT at the NIU.

Response 8

Command rejected. NIU <niu_number> is not in-service.

Explanation

Paddle board link maintenance actions cannot be executed on an unequipped (UnEq), off-line (Offl), system busy (SysB), or manually busy (ManB) NIU PM.

System action

N/A

User action

No user action required since command is not applicable to the maintenance state of the NIU.

Response 9

Command rejected. NIU <niu_number> unit <0 or 1> is not ManB.

Explanation

Paddle board link maintenance actions cannot be executed on the inactive unit NIU PB if the inactive NIU unit is not manually busy (ManB).

System action

N/A

User action

Initiate a BSY INACTIVE for the NIU.

Response 10

Command rejected. Unable to get NIU <niu_number> states.

-or-

Command rejected. Unable to get NIU <niu_number> node number.

Explanation

BsyLnks request has been aborted for some internal reason.

System action

N/A

User action

Check logs for abort reason, specifically the SWERR logs.

Response 11

NIU <niu_number> unit <0 or 1> is not accessible, (NA). Do you wish to proceed?

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

Communication with NIU maintenance cannot be established so the BsyLnks request cannot determine if service will be affected.

System action

Wait for input from prompt.

User action

Initiate craftsperson actions to recover NIU from ISOLATED state. Refer to the appropriate alarm clearing procedure. This can be bypassed by using the FORCE or NOPROMPT options.

Response 12

NIU <niu_number> unit <0 or 1> is under maintenance. Do you wish to proceed?

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

Other maintenance actions are being executed on the unit facing the paddle board. This is indicated by the “/Mtce” flag on the NIU PM MAP level display. The BsyLnks request cannot determine if service will be affected.

System action

Wait for input from prompt.

User action

The BsyLnks command can be re-entered once the “/Mtce” flag is removed from the PM MAP level display of the posted NIU. This can be bypassed with the FORCE or NOPROMPT option. Alternatively, an ABTK command to terminate maintenance on the NIU can be issued.

Notes

N/A

Examples

General use command syntax, enter:

> BSYLNKS INACTIVE

To P-side busy the paddle board 0 network links, enter:

> BSYLNKS PB 0

To P-side busy the paddle board 1 network links with no command response required, enter:

> BSYLNKS PB 1 NOREPLY

To P-side busy the inactive paddle board network links using the equivalent function key and without system checking, enter:

> 7 INACTIVE FORCE

To P-side busy the paddle board 1 network links using the equivalent function key for the BSYLNKS command, enter:

> 7 PB 1

Command name: RTSLNKS**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

This command is used to return to service the paddle board network links.

Warning

N/A

Command syntax

RTSLNKS: Return to service the paddle board links.

Parms: <RTS links What?>{ PB <paddle board number> {0 TO 1},

INACTIVE }

[<Force Option>{ FORCE }]

[<Prompt Option>{ NOPROMPT }]

[<Options>{ NOWAIT,
NOREPLY }]

Parameter definitions

Table 2-122 : Parameters used with the RTSLNKS command.

PARAMETER	VALUE	DEFINITION
PB	N/A	Not optional. Indicates that a particular paddle board links are to be returned to service.
paddle board number	0, 1	Not optional. Specifies which paddle board links are to be returned to service.
INACTIVE	N/A	Not optional. Indicates that the inactive NIU UNIT paddle board links are to be returned to service.
FORCE	N/A	Optional Indicates that the user wishes to return to service the paddle board links regardless of test failures.

Table 2-122 : Parameters used with the RTSLNKS command.

PARAMETER	VALUE	DEFINITION
NOPROMPT	N/A	Optional. Indicates that the user does not wish to respond to any prompts. The response to all prompts defaults to "YES".
NOWAIT	N/A	Optional. Indicates that the user does not want to wait in-line while the command is being executed.
NOREPLY	N/A	Optional. Indicates that the user does not want any textual responses to the command.

Responses

When an RTSLnks command is issued on a paddle board, the maintenance system attempts to return to service all the DS-30 network links terminating on the NIU DS-30 Link paddle board. The RTSLnks command can only clear a P-side busy condition on the DS-30 network links. Off-line (OffL), manually busy (MBsy), C-side busy (C-bsy), and system busy (SBsy) DS-30 network link conditions must be cleared at the network links (MAPCI;MTC;NET) MAP level since the network owns the DS-30 network links.

Response 1

Link <0 to 7> is already OK.

Command completed.

Explanation

No need to execute the command as the paddle board link indicated is already in an in-service (InSv) state.

System action

N/A

User action

N/A

Response 2

Link <0 to 7> will remain <C-bsy, MBsy, SBsy, or Offl >.

Command completed.

Explanation

If the NET (network) MAP level has set the links off-line (OffL), system busy (SysB), or manually busy (ManB); then the NET MAP level must be used to restore the links to service.

System action

N/A

User action

Return the links to in-service at the network (NET) MAP level.

Response 3

Command completed.

Explanation

The paddle board links have been returned to service.

System action

The paddle board link states are updated accordingly.

User action

N/A

Response 4

Command rejected. NIU <niu_number> is not in-service.

Explanation

Paddle board link maintenance actions cannot be executed on an unequipped (UnEq), off-line (OffL), system busy (SysB), or manually busy (ManB) NIU PM.

System action

N/A

User action

No user action required since command is not applicable to the maintenance state of the NIU.

Response 5

Command rejected. Unable to get NIU <niu_number> states.

-or-

Command rejected. Unable to get NIU <niu_number> node number.

Explanation

RTSLnks request has been aborted for some internal reason.

System action

N/A

User action

Check logs for abort reason, specifically the SWERR logs.

Response 6

Command rejected. NIU <niu_number> unit <0 or 1> is ACTIVE.

Explanation

The paddle board links cannot be returned to service if the PB belongs to the active NIU unit.

System action

N/A

User action

Initiate a SWACT at the NIU.

Response 7

NIU <niu_number> unit <0 or 1> is not accessible, (NA). Do you wish to proceed?

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

Communication with NIU maintenance cannot be established so the RTSLnks request cannot determine how the command will affect the NIU.

System action

Wait for input from prompt.

User action

Initiate craftsperson actions to recover NIU from ISOLATED state. Refer to the appropriate alarm clearing procedure. This can be bypassed by using the FORCE or NOPROMPT options.

Response 8

NIU <niu_number> unit <0 or 1> is under maintenance. Do you wish to proceed?

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation

Other maintenance actions are being executed on the unit facing the paddle board. This is indicated by the “/Mtce” flag on the NIU PM MAP level display. The RTSLnks request cannot determine how the command will affect the NIU.

System action

Wait for input from prompt.

User action

The RTSLnks command can be re-entered once the “/Mtce” flag is removed from the PM MAP level display of the posted NIU. This can be bypassed with the FORCE or NOPROMPT option. Alternatively, an ABTK command to terminate maintenance on the NIU can be issued.

Notes

N/A

Examples

General use command syntax, enter:

```
> RTSLNKS INACTIVE
```

To return to service the network links on paddle board 0, enter:

```
> RTSLNKS PB 0
```

To return to service the network links on paddle board 1 with no command response required, enter:

```
> RTSLNKS PB 1 NOREPLY
```

To return to service the inactive NIU unit network links using the command menu option and bypassing system checking, enter

```
> 8 INACTIVE FORCE
```

Alarms

Alarm name: N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AR0797mm.aa03**Directories**

PROGDIR

Table of new/modified directories**Accessing directory: progdir****To access**

not applicable

To return to CI

not applicable

Commands

utilize

Table of New/modified commands**Table 2-123**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
utilize	new		progdir

Command name: utilize**Command type**

non-menu

Command target

BRISC SuperNode

Command availability

res

Command description

This command provides Northern Telecom and its customers access to all of the capacity data which has been collected for usage sensitive pricing. This command shows mean hourly CM capacities for the last 90 days and determines the appropriate billing zone for the switch based on this data.

Warning

Command syntax

UTILIZE -- BRISC Usage Sensitive Pricing

Parms: {<report type> {REPORT
SUMMARY}}

Parameter definitions

Table 2-124

PARAMETER	VALUE	DEFINITION
report type	REPORT or SUMMARY	determines how much information is displayed; not optional

Responses

Response

*** Warning: only <n> days of data were collected ***

Explanation

Only <n> days of data are available, instead of 90 days. This may affect the calculation of the effective billing zone. This will happen when less than 90 days has elapsed since the image has been booted.

System action

User action

No action necessary. The user may want to wait until at least 90 days have passed to determine the billing zone within which the switch is operating.

The following responses can be found in the Exception Report at the bottom of the UTILIZE Report. The exception report is generated only if there were one or more of the following exceptions in the previous 90 days:

Response

dd/mm - UTILIZEP process trapped n times.

dd/mm - UTILIZEP process killed n times.

dd/mm - UTILIZEP process suicide n times.

dd/mm - UTILIZEP process swerr n times.

Explanation

The UTILIZEP recorded a trap, assassination, suicide, or a swerr for itself on the given day. The number of occurrences of the event (1, 2, or 3 or more) for that day is shown.

System action

User action

No action necessary. This information can be used by NT in conjunction with BNR design to determine if some of the capacity data may be erroneous.

Response

dd/mm - Date changed

dd/mm - Time changed

dd/mm - Checksum violation

Explanation

The UTILIZEP recorded a date change, time change or internal checksum discrepancy for itself on the given day.

System action

User action

No action necessary. This information can be used by NT in conjunction with BNR design to determine if some of the capacity data may be erroneous.

Notes

Examples

Example of the REPORT option:

```
>utilize report
(checksum:678c30005ab670d7) - 93/09/01 09:31:30 SN100
RBCS37BK - RTM
```

Zone	Range	Mean CAPacity Distribution Last 90 days:

1	0% - 28%	10	
2	29% - 42%	70	
3	43% - 48%	10	<=== Current Capacity Zone
4	49% >	0	

Currently in Zone 3; reached or exceeded in 10 days out of the last 90 days:

	Date	Time	%CAP	%AUXCP	%UTIL
3 highest hours (discarded):	08/02	10-11	47	89	47
	08/05	13-14	47	92	47
	08/23	13-14	46	85	46
fourth highest hour:	08/03	12-13	46	84	46

Current Settings:	NETMTC share setting:	4%
Guaranteed_Terminal_CPU_Share: 2%	DNC share setting:	3%
AUXCP_CPU_Share: 8%	SNIP share Setting:	0%

Detailed Mean CAPacities (last 90 days):

Date	Time	%CAP	%AUXCP	%UTIL	Samples	Date	Time	%CAP	%AUXCP	%UTIL	Samples
06/02	10-11	40	75	40	24	07/16	13-14	38	77	38	24
	12-13	42	70	42			14-15	36	74	36	
	13-14	39	68	39			16-17	32	70	32	
06/03	11-12	32	80	32	24	07/03	12-13	46	83	46	24
	13-14	38	68	38							
	15-16	37	60	37							
.						.					
.						.					
.						.					
07/15	11-12	36	70	36	24	08/30	11-12	32	65	32	24
	13-14	37	70	37			12-13	41	125	43	
	14-15	31	60	31			14-15	38	80	38	
>											

Example of the SUMMARY option:

```
>utilize summary
93/09/01 09:31:30 SN100
RBCS37BK - RTM
```

```

Mean CAPacity Distribution:
Zone   Range      Last 90 days:
  1    0% - 28%    10
  2    29% - 42%   70
  3    43% - 48%   10    <=== Current Capacity Zone
  4    49% >      0

```

Currently in Zone 3; reached or exceeded in 10 days out of the last 90 days:

	Date	Time	%CAP	%AUXCP	%UTIL
3 highest hours (discarded):	08/02	10-11	47	89	47
	08/05	13-14	47	92	47
	08/23	13-14	46	85	46
fourth highest hour:	08/03	12-13	46	84	46

>

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AR0765mm.ab03**Directories****Table of new/modified directories**

N/A

Accessing directory:

N/A

To access

N/A

To return to CI

N/A

Commands**Table of New/modified commands****Table 2-125**New commands of the NIU level.

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
ABTK	NEW	N/A	WSMPCI & NIUDVCI

Command name: ABTK**Command type**

Unlisted MENU

Command target

SUPERNODE

Command availability

RES

Command description

The ABTK command is used by the craft to terminate any maintenance in progress on a NIU or group of NIUs. The command which is currently executing on a NIU will be aborted as well as any system initiated recovery.

Warning

N/A

Command syntax

ABTK: Aborts the command currently executing.

Params: [<ALL Option> {ALL}]
 [<Options> {NOWAIT,
 NOREPLY}]

Parameter definitions

Table 2-126 Parameters used with the ABTK command.

PARAMETER	VALUE	DEFINITION
ALL	N/A	Optional. Indicates that the command is to be executed on all the NIUs in the post set.
NOWAIT	N/A	Optional. Indicates that the user does not wish to wait in-line while the command is being executed.
NOREPLY	N/A	Optional. Indicates that the craft does not wish to receive any text responses to the command.

Response

NIU 1 Abtk PM: Request has been submitted.
 NIU 1 Abtk PM: Command completed.
 NIU 1 Load PM: Command aborted. TEAM2 initiated Abtk command.

-OR-

NIU 1 Abtk PM: Request has been submitted.
 NIU 1 Abtk PM: Command rejected. Abtk not allowed on current maintenance in progress.

Explanation:

If the ABTK command completed successfully then the top response should be expected. This response displays the command that was aborted (in this case LoadPM) and the console which originated the ABTK command (in this case TEAM2).

If the ABTK command is rejected then one should expect the lower response. This response indicates that the type of maintenance currently running in the NIU cannot be aborted.

System action:

N/A

User action:

N/A

Notes

N/A

Examples

>ABTK ALL

>ABTK NOWAIT

>ABTK NOREPLY

Alarms**Alarm name: N/A**

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AR0789mm.aa08**Directories****Table of new/modified directories****Table 2-127 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
CMDEBUG	CHANGED		SN	NONRES
CMINFO	CHANGED		SN	NONRES
REXDEBUG	CHANGED		SN	NONRES

Accessing directory: CMDEBUG**To access**

CMDEBUG

To return to CI

QUIT

Accessing directory: CMINFO**To access**

CMINFO

To return to CI

QUIT

Accessing directory: REXDEBUG**To access**

REXDEBUG

To return to CI

QUIT

Commands

Table of New/modified commands

Table 2-128 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
CORSTAT	CHANGED		CMINFO
CORSTAT	CHANGED		REXDEBUG
DETUNE	DELETED		CMDEBUG

Command name: CORSTAT

Command type

Non-menu

Command target

SUPERNODE

Command availability

NONRES

Command description

This command displays status information about the DMS-Core processor, including the states of processor detuning options. Since processor optionality is being implemented via an office parameter in this feature, and the SuperNode Series 10 (detuned) processor has been discontinued, this information will be removed from CORSTAT output.

This command is implemented identically in two test tools, CMINFO and REXDEBUG. The changes made by this feature will be identical in both instances.

Warning

Not applicable

Command syntax

CORSTAT

Parameter definitions

No parameters

Responses

Response:

```
09:01:15
Cpus are not in sync.
Main memory is not in update mode.
Motherboard SRAM is not in update mode.
HPM SRAM is not in update mode.
Data cache is on.
Data cache is not locked.
Data cache parity is on
Handshake Override is off.
Access protection is on.
Bus parity is enabled.
Parity interrupt is enabled.
Stack checking is complete.
The instruction cache is on.
CPU 0 clock is CM clock source.
Optimum MS I/O routine.
Active CPU is 0. Processor vintage is mc68030_33.
Configuration Vector from EqPEC : 00000000
Current Configuration Vector      : 00000000
Actual Configuration Vector       : 00000000
Current S/W Package Vector        : 00000000
Actual S/W Package Vector         : 00000000
...
```

Explanation :

The highlighted text will be removed from the output.

System action:

None.

User action:

None.

Notes

None.

Examples**Command name:** DETUNE**Command type**

Non-menu

Command target

SUPERNODE

Command availability

NONRES

Command description

This command displays the current state of the processor detuning options, and enables the user of the tool to modify any of the detuning option flags. With the implementation of processor optionality via an office parameter by this feature, the detuning data structures have been made obsolete so this command is no longer needed.

Alarms**Alarm name:**

PrcOpt

Conditions required to raise the alarm

Failure of the processor optionality verification check, performed (1) after every restart, (2) prior to every sync attempt, and (3) on every update to the cm_processor_option office parameter.

Duration of the alarm

The alarm will persist until the processor option verification check passes. This may require changing the processor optionality office parameter value, which can only be done by authorized NT personnel.

AR0790mm.aa09

Introduction

The purpose of this activity is to create a mechanism that allows a user to perform a Data Transfer using HPSOS from one workstation to another workstation or to the same workstation but to a different HPSOS session. This activity eliminates the need for a DMS switch when testing Data Transfer problems and Table Control reformat problems. *This does not mean that all ONP Data Transfer Testing will be done on workstations. Some testing at specified gates must be performed on a real DMS switch since WOWDT is using S/W emulation¹.*

This activity implements WOWDT, which is one of the defined activities of the ONP Test Automation Team. One of the objectives of the team is to introduce WOWDT in BNR Loadbuild to datafill Captive Office (CO) loads on a weekly basis. This would substantially increase the number of weekly ONP tests in Ottawa that could be performed (approximately one hundred CO images are being built weekly in Ottawa) . WOWDT facilitates the introduction of ONP Data Transfer into BNR Loadbuild since it provides a cost effective method to datafill BNR CO loads using workstations.

This feature implements the following MMI changes:

- i) two new CI increments: NEWDATA and MCR
- ii) a new platform for the TABXFR increment

Directories

Table 2-129 Table of Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
TABXFR	CHANGED		SN	RES
NEWDATA	NEW		SN	RES
MCR	NEW		SN	RES

¹Testing on DMS switches will uncover problems which relate to process synchronization. Delays introduced by an active DMS switch may put the ONP Data Transfer process out of sync and cause software errors. These delays are not equivalent on a workstation.

Accessing directory: TABXFR**To access**

TABXFR

To return to CI

QUIT

Accessing directory: NEWDATA**To access**

NEWDATA

To return to CI

QUIT

Accessing directory: LBPLUS**To access**

LBPLUS

To return to CI

QUIT

Commands**Table of New/modified commands****Table 2-130 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
SETUP	CHANGED		TABXFR
NEWDATA	NEW		NEWDATA
INCLUDE	NEW		NEWDATA
COLLECT	NEW		NEWDATA
HELP	NEW		NEWDATA
QUIT	NEW		NEWDATA

Table 2-130 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
MCR	NEW		MCR
ENABLE	NEW		MCR
DISABLE	NEW		MCR
BIND	NEW		MCR
UNBIND	NEW		MCR
HELP	NEW		MCR
QUIT	NEW		MCR

Command name:SETUP

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

A subcommand of TABXFR to specify which type of data move is to be performed, such as : STANDARD, etc. It is used to initialize the data move system for the type of application being performed. With this feature, a new platform will be created to perform the data transfer and will be called Workstation Data Transfer (WSDT).

Warning

N/A

Command syntax

> SETUP <type>

Parameter definitions

Table 2-131 SETUP Parameter Definitions

PARAMETER	VALUE	DEFINITION
type	STANDARD	Standard split switch application
	DUMPONLY	Perform the dump part of the data move
	ACTREST	Perform the restore part of the data move
	THIRDPRO	Third processor assisted data move
	WSDT	Workstation data move

Responses

Response 1

TABXFR type set to XXXX.

Explanation:

This verifies that the command was successfully entered. XXXX is an echo of the type entered as a parameter.

System action:

none

User action:

none

Response 2

ERROR : XXXX is running. SETUP command ignored.

Explanation:

The SETUP command is not valid when one of the following is running: MOVEBCS, TABXFR or RESTAB. The appropriate command replaces XXXX in the above ERROR message.

System action:

None

User action:

Type 'CANCEL' and do the SETUP command again.

Notes

N/A

Examples

SETUP WSDT

TABXFR type set to : WSDT

Command name:NEWDATA

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This is a new CI command which will be used to process the new Data requests.

Warning

None

Command syntax

NEWDATA

Parameter definitions

None

Responses

NEWDATA:

Response

Explanation:

This verifies that you have entered the new CI increment : NEWDATA. The response will be visible on all targets.

System action:

NEWDATA:

User action:

None

Notes

N/A

Examples

NEWDATA

NEWDATA:

Command name: INCLUDE**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is sub-command of the new CI : NEWDATA. Include will take the new Data Request from the DMOPRO type files and will try and datafill the old software release if the type versions are identical or store the data in the new table BLDDATA.

Warning

N/A

Command syntax

INCLUDE

Parameter definitions

Table 2-132 INCLUDE Parameter Definitions

PARAMETER	VALUE	DEFINITION
file_name	i.e. name of table	the name of the DMOPRO type file

Responses

Response

The following tuple(s) were added to table <YYYY> in lab XXXX.

<tuples>

N tuple(s) added to <YYYY>

Where: N is some number; YYYY is the table name and XXXX is the office name.

Explanation:

Indicates to the user that some of the new data requests were added to the tables in the old datafilled load.

System action:

None

User action:

None

Notes

None

Examples

INCLUDE <file_name>

Here is an example of a NEWDATA:INCLUDE session:

```
>HPFILE 'NEWDATA_930705183005' new_data
>NEWDATA
NEWDATA:
>include new_data BASE CSP04 CSP04
The following tuple(s) were added to BLDDATA:
ALAIN MAINT 0 ELO NCRT 2X47AA
1 tuple added to table BLDDATA in ECCOMB.
>
<<*>> CSP02CR ECCOMB Datafilled <<*>>
NEWDATA:
>
>
<<*>> CSP02CR ECCOMB Datafilled <<*>>
NEWDATA:
>
>
```

Command name: COLLECT

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This is a subcommand of the new CI command : NEWDATA. It will dump the table data in a DMOPRO type file. The file will contain the old datafill with the new datafill requests.

Warning

None

Command syntax

COLLECT TABLE <table_name>

Parameter definitions

Table 2-133 COLLECT Parameter Definitions

PARAMETER	VALUE	DEFINITION
table_name	string range	any valid table name in the that office

Responses

Response

None

Notes

None

Examples

COLLECT TABLE TRKGRP

Command name:HELP

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command provides a description of each subcommand in the NEWDATA increment.

Warning

None

Command syntax

HELP <parameter>

Parameter definitions

Table 2-134 HELP Parameter Definitions

PARAMETER	VALUE	DEFINITION
parameter	HELP	Describe the NEWDATA increment with its associated subcommands
	QUIT	Describes the QUIT command
	INCLUDE	Describes the INCLUDE command
	COLLECT	Describes the COLLECT command

Responses

The NEWDATA increment is used to process the new Data Requests. The increment consists of the following subcommands:

INCLUDE COLLECT HELP QUIT

Response 1

Explanation:

To provide a description of the NEWDATA increment with its associated subcommands.

System action:

None

User action:

None

Response 2

QUIT will exit from the NEWDATA increment.

Explanation:

To provide a description of the QUIT command of the NEWDATA increment.

System action:

None

User action:

None

Response 3

The INCLUDE command will attempt to add the NEW DATA REQUESTS to the old software release load if the type versions are identical else the new data is added to table BLDDATA.

Explanation:

To provide a description of the INCLUDE command of the NEWDATA increment.

System action:

None

User action:

None

Response 4

The Collect command will dump the table where new data has been added to. The whole table is dumped including the old datafill.

Explanation:

To provide a description of the COLLECT command of the NEWDATA increment.

System action:

None

User action:

None

Notes

None

Examples

HELP INCLUDE

HELP COLLECT

Command name:QUIT

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command exits from the NEWDATA increment level.

Warning

None

Command syntax

QUIT

Parameter definitions

None

Responses

None

Notes

None

Examples

QUIT

Command name:MCR**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is a new CI command used to setup the MCR link so the two CM's have a way of communicating.

Warning

None

Command syntax

MCR

Parameter definitions

None

Responses

MCR:

Response**Explanation:**

This verifies that you have entered the new CI increment: MCR. The response will be visible on all targets.

System action:

MCR:

User action:

None

Notes

None

Examples

MCR

MCR:

Command name:ENABLE

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This is a subcommand of the new CI increment: MCR. This command will connect the ACTIVE CM to the INACTIVE CM to allow communication between the two. It will create a Virtual MCR link.

Warning

None

Command syntax

ENABLE <node_name>

Parameter definitions

Table 2-135 ENABLE Parameter Definitions

PARAMETER	VALUE	DEFINITION
node_name	string range	The node where the ACTIVE HPSOS session is running on

Responses

Response 1

Connect in progress.

Explanation:

This updates the user on what the command is doing. It tells the user that the connection to the INACTIVE side is being attempted.

System action:

Setting up the Virtual MCR link

User action:

None

Response 2

Successfully connected to Virtual MCR link at <node_name>.

Explanation:

This verifies that the Virtual MCR link has been established and the communication link between the two CM's is functional.

System action:

Setting up the Virtual MCR link

User action:

None

Response 3

Connection failed .(rc=&\$). Retrying...

Explanation:

This alerts the user that the connection has failed for the first attempt. It will attempt to connect the link 3 times before aborting command.

System action:

Setting up the Virtual MCR link

User action:

None

Response 4

Connection to MCR Virtual Link failed Please check the hostname and try again. Try to MCR UNBIND and MCR BIND on the HPSOS emulating the INACTIVE CM.

Explanation:

This alerts the user that the connection has failed. It will provide a course of action on what the user should do next.

System action:

Setting up the Virtual MCR link

User action:

Check the hostname first. Then try the MCR UNBIND and MCR BIND commands next.

Notes

None

Examples

ENABLE bcarhe8

Command name:DISABLE**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is a subcommand of the new CI increment: MCR. This command is used to disconnect the ACTIVE side from the INACTIVE side.

Warning

None

Command syntax

DISABLE <node_name>

Parameter definitions

Table 2-136 DISABLE Parameter Definitions

PARAMETER	VALUE	DEFINITION
node_name	string range	The node where the ACTIVE HPSOS session is running

Responses

Successfully disconnected the Virtual MCR link at <node_name>.

Response

Explanation:

This verifies to the user that the Virtual MCR link has been disconnected and no communication link is functional between the two CM's.

System action:

Disconnect the Virtual MCR link.

User action:

None

Notes

None

Examples

DISABLE bcarhe8

Command name: BIND

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command is a subcommand of the new CI increment: MCR. This command will be run on the INACTIVE CM and will make the socket on the INACTIVE side “listen”. A listen socket allows another socket to connect to it.

Warning

None

Command syntax

BIND <node_name>

Parameter definitions

Table 2-137 BIND Parameter Definitions

PARAMETER	VALUE	DEFINITION
node_name	string range	The node where the INACTIVE HPSOS session is running

Responses

Response 1

Command only available on INACTIVE CM

Explanation:

This alerts the user that this command is run on the INACTIVE CM only.

System action:

None

User action:

Initiate command on the INACTIVE side

Response 2

Virtual MCR link is bounded on INACTIVE CM.

Explanation:

This alerts the user that the command has successfully bound the socket (i.e. the socket is listening for connection to another socket).

System action:

Prepare the socket to allow a connection from another socket

User action:

None

Notes

None

Examples

BIND bcarhe8

Command name:UNBIND**Command type**

NONMENU

Command target

BOTH

Command availability

RES

Command description

This commnd is a subcommand of the new CI increment: MCR. The command is used on the INACTIVE side only if a BIND at restart on the INACTIVE side has failed.

Warning

None

Command syntax

UNBIND <node_name>

Parameter definitions

Table 2-138 UNBIND Parameter Definitions

PARAMETER	VALUE	DEFINITION
node_name	string range	The node where the INACTIVE HPSOS session is running

Responses

Response 1

Command only available on INACTIVE CM

Explanation:

This alerts the user that this command is run on the INACTIVE CM only.

System action:

None

User action:

Initiate command on the INACTIVE side

Response 2

Virtual MCR link is no longer bounded on the INACTIVE CM

Explanation:

This alerts the user that the comand has been executed successfully. The socket is no longer available to connect an ACTIVE socket to it.

System action:

Prevents the socket form “listening”.

User action:

None

Notes

None

Examples

UNBIND bcarhe8

Command name:HELP

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command provides a description of each subcommand in the MCR increment.

Warning

None

Command syntax

HELP <parameter>

Parameter definitions

Table 2-139 HELP Parameter Definitions

PARAMETER	VALUE	DEFINITION
parameter	HELP	Describe the NEWDATA increment with its associated subcommands
	QUIT	Describes the QUIT command
	ENABLE	Describes the ENABLE command
	DISABLE	Describes the DISABLE command
	BIND	Describes the BIND command
	UNBIND	Describes the UNBIND command

Responses

The MCR increment is used to establish a connection between the ACTIVE CM and the INACTIVE CM. The increment consists of the following subcommands:

ENABLE DISABLE BIND UNBIND HELP QUIT

Response 1

Explanation:

To provide a description of the MCR increment with its associated subcommands.

System action:

None

User action:

None

Response 2

QUIT will exit from the MCR increment.

Explanation:

To provide a description of the QUIT command of the NEWDATA increment.

System action:

None

User action:

None

Response 3

The ENABLE command will attempt to connect the ACTIVE CM to the INACTIVE CM.

Explanation:

To provide a description of the ENABLE command of the MCR increment.

System action:

None

User action:

None

Response 4

The DISABLE command will attempt to disconnect the ACTIVE CM from the INACTIVE CM.

Explanation:

To provide a description of the DISABLE command of the MCR increment.

System action:

None

User action:

None

Response 5

The BIND command will attempt to setup the INACTIVE socket to “listen”. This will allow another socket to connect to it.

Explanation:

To provide a description of the BIND command of the MCR increment.

System action:

None

User action:

None

Response 6

The UNBIND command will not allow the INACTIVE socket to “listen”. Therefore, no connections can be established.

Explanation:

To provide a description of the UNBIND command of the MCR increment.

System action:

None

User action:

None

Notes

None

Examples

HELP ENABLE

HELP BIND

Command name:QUIT

Command type

NONMENU

Command target

BOTH

Command availability

RES

Command description

This command exits from the MCR increment level.

Warning

None

Command syntax

QUIT

Parameter definitions

None

Responses

None

Notes

None

Examples

QUIT

AR0893mm.ab01**Directories**

No directory is affected

Table of new/modified directories

Not applicable

Accessing directory:

Not applicable

To access

Not applicable

To return to CI

Not applicable

Commands**Table of New/modified commands**

Table 2-140 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
Traver	Changed	Not applicable	TRAVER
Trnslvf	Changed	Not applicable	MAPCI;MTC;TRKS;TTP

Command name:Traver

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAVER (TRAnslation VERification) is a low level diagnostic tool that simulates a call from a user-specified origination to a user-specified destination. TRAVER examines and displays translation and routing data for a single call leg and verifies the translation tables.

An new option, AINCHG, is added to the list of available option for Traver to lay down the necessary ground work for the development of AINSSP Enhanced TR Compliance. Since this option is not supported until the Enhanced TR Compliance feature is available, an error message is given if such an option is specified without the Enhanced TR Compliance software.

Warning

None.

Command syntax

1A new option, AINCHG, is added to the Traver command¹.

.Example of the new Traver syntax with AINCHG option

```
Traver tr ibnt2 26992 AINCHG 6137225993 b
```

Parameter definitions

Table 2-141 TRAVER Parameter Definitions

PARAMETER	VALUE	DEFINITION
AINCHG	0 to 15 digits ^a	The ChargeNumber apply to the call

a. In this activity, using option AINCHG in Traver command results in error condition

¹Even though the option is available in TL02, specifying this option in Traver command without AINSSP Enhanced TR Compliance feature, which will be delivered in CNA03, will result in error condition

Responses

ERROR: Software not available to support AINCHG option

Explanation:

Because of the different delivery cycle between TL02 and CNA03, the software needed to support the AINCHG option in CNA03 is not ready to deliver along with the TL02. Therefore, the AINCHG option is not supported until CNA03 is delivered

System action:

The execution of Traver will be stopped.

User action:

Users must re-enter the Traver command without the AINCHG option if the above error message is encountered.

Notes

Although AINCHG option for Traver command is available in TL02, it will not be supported until CNA03 is delivered. In the mean time, users entering this option will get error message as described.

Examples

```
Traver tr ibnt2 26992 AINCHG 6137225993 b
ERROR: Software not available to support AINCHG option
```

Command name:TrnsIVF

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

TrnslVF (TRaNSLation VeriFication) is a low level diagnostic tool available under TTP level of MAPCI that simulates a call originated from the posted trunk to a user-specified destination. TrnslVF examines and displays translation and routing data for a single call leg and verifies the translation tables.

An new option, AINCHG, is added to the list of available option for TrnslVF to lay down the necessary ground work for the development of AINSSP Enhanced TR Compliance. Since this option is not supported until the Enhanced TR Compliance feature is available, an error message is given if such an option is specified without the Enhanced TR Compliance software.

Warning

None.

Command syntax

A new option, AINCHG, is added to the Traver command¹.

Table 2-142.Example of the new Traver syntax with AINCHG option

TRNSLVF 6137226992 AINCHG 6137227070 T

Parameter definitions

Table 2-143 TRNSVL Parameter Definitions

PARAMETER	VALUE	DEFINITION
AINCHG	0 to 15 digits ^a	The Number used for getting the GTV and TT information when the call triggers

a. In this activity, using option AINCHG in Traver command results in error condition

¹Even though the option is available in TL02, specifying this option in Traver command without AINSSP Enhanced TR Compliance feature, which will be delivered in CNA03, will result in error condition

Response

ERROR: Software not available to support AINCHG option

Explanation:

Because of the different delivery cycle between TL02 and CNA03, the software needed to support the AINCHG option in CNA03 is not able to be delivered along with the TL02 software. Therefore, the AINCHG option is not supported until CNA03 is delivered

System action:

The execution of TrnsLVF will be stopped.

User action:

Users must re-enter the TrnsLVF command without the AINCHG option if the above error message is encountered.

Notes

Although AINCHG option for TrnsLVF command is available in TL02, it will not be supported until CNA03 is delivered. In the mean time, users entering this option will get error message as described.

Examples

```
TRNSLVF 6137226992 AINCHG 6137227070 T
ERROR: Software not available to support AINCHG option
```

Alarms

Alarm name: None

Conditions required to raise the alarm

Duration of the alarm

AR0940mm.aa12**Directories**

No changes to directories

Accessing directory:

Not applicable

To access

Not applicable

To return to CI

Not applicable

Commands**Table of New/modified commands**

Table 2-144 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	CHANGED		TRAVER
TRNSLVF	CHANGED		MAPCI;MTC;TRKS;TTP

Command name:

TRAVER, TRNSLVF

Command type

TRAVER is non-menu, TRNSLVF is menu

Command target

SuperNode

Command availability

Res

Command description

TRAVER (TRAnslation VERification) is a low level diagnostic tool that simulates a call from a user-specified origination to a user-specified destination. TRAVER examines and displays translation and routing data for a single call leg and verifies the translation tables.

The TRNSLVF command performs TRAVER on an incoming or two-way trunk posted on the TTP access level of the MAP. The output of TRNSLVF is similar to TRAVER output.

This activity enhances TRAVER and TRNSLVF to indicate whether or not an agent is AIN supported for both the originating call model and the terminating call model.

Warning

Not applicable

Command syntax

Not applicable

Responses

Response

The following messages are displayed when the trace enters the first trigger detection point depending on the originating agents level of AIN support.

When the originator is neither AIN 0.1 supported, or AIN 0.1 TAT supported, the following message is displayed. This is the same message that was displayed prior to this feature for all unsupported agents.

Figure 2-60 Originator is not AIN 0.1 supported

Originator is not an AIN agent, therefore AIN info is not processed

When the originator is not AIN 0.1 supported, but is AIN 0.1 TAT supported, the following message is displayed.

Figure 2-61 Originator is AIN 0.1 TAT supported

Originator is supported for AIN Termination Attempt Trigger only, therefore other AIN info is not processed

When the originator is AIN 0.1 supported (and therefore AIN 0.1 TAT supported) no message is displayed.

Explanation:

N/A

System action:

None

User action:

None

Notes

Not Applicable

Examples

In the following examples bold font indicates the lines that are changed. Examples of TRAVER output are given for before and after this feature. The changes made to TRAVER output also apply to TRNSLVF output.

Figure 2-62Traver Output For Unsupported Agent Before This Feature

```

traver l 6211002 6211179 b
TABLE LINEATTR
6 CDF NONE LO FR01 0 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL NIL 00 N
$
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
Originator is not an AIN agent, therefore AIN info is not processed.
TABLE STDPRTCT
P621 ( 1) ( 0) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 621 632 N NP 0 NA
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE HNPACONT
613 984 1 ( 290) ( 1) ( 84) ( 0) 0
. SUBTABLE HNPACODE
. 621 621 DN 613 621
TABLE TOFCNAME
613 621
TABLE DNINV
613 621 1179 L HOST 00 0 09 19
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LCASCRCN
613 L613 ( 13) OPTL N
. SUBTABLE LCASCR
. 621 623
TABLE PFXTREAT
OPTL NP Y NP UNDT
TABLE CLSVSCRC
KEY NOT FOUND
DEFAULT IS TO LEAVE XLA RESULT UNCHANGED
+++ TRAVER: SUCCESSFUL CALL TRACE +++

```

Figure 2-63 Traver Output For AIN 0.1 TAT Agent After this Feature

```

traver l 6211002 6211179 b
TABLE LINEATTR
6 CSP NONE LO FR01 0 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL NIL 00 N
$
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
ORIGINATOR IS SUPPORTED FOR AIN TERMINATION ATTEMPT TRIGGER ONLY, THEREFORE OTHER
AIN INFO IS NOT PROCESSED
TABLE STDPRTCT
P621 ( 1) ( 0) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 621 632 N NP 0 NA
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE HNPACONT
613 984 1 ( 290) ( 1) ( 84) ( 0) 0
. SUBTABLE HNPACODE
. 621 621 DN 613 621
TABLE TOFCNAME
613 621
TABLE DNINV
613 621 1179 L HOST 00 0 09 19
TABLE DNFEAT
613 621 1179 (AINDN TERM_TRIGGRP) $
TABLE TRIGGRP
TERM_TRIGGRP TERMATT
. TERMATT $ NETINFO
. . NETINFO EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6136211179 6136211179 SSNONLY (AINTST) $
AIN Term Attempt TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

```


Alarms**Alarm name:**

Not applicable

Conditions required to raise the alarm

Not applicable

Duration of the alarm

Not applicable

AR0995mm.ab01**Directories****Table of new/modified directories****Table 2-145 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
ALT_BBT_DIR	NEW			RES

Accessing directory:**To access**

MAPCI;MTC;LNS;ALT

To return to CI

Quit all

Commands**Table of New/modified commands****Table 2-146 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
BBT	NEW		LN_ALT_TOPDIR
QUIT	NEW		ALT_BBT_DIR
POST	NEW		ALT_BBT_DIR
START	NEW		ALT_BBT_DIR
STOP	NEW		ALT_BBT_DIR
REMOVE	NEW		ALT_BBT_DIR
DEFINE	NEW		ALT_BBT_DIR
SUBMIT	NEW		ALT_BBT_DIR
DEFMAN	NEW		ALT_BBT_DIR
DEFSCHD	NEW		ALT_BBT_DIR
STATUS	NEW		ALT_BBT_DIR

Command name:BBT**Command type**

MENU command of ALT

Command target

SUPERNODE

Command availability

RES

Command description

This command allows the user to enter the ALTBBT sub-level. If the name of a BBT testid is passed in as parameter, then it gets posted at the sub-level. If a manual BBT testid has been defined, then the manual testid is posted automatically as the sub-level is entered.

Warning**Command syntax**

BBT <testid name>

Parameter definitions

Table 2-147 BBT Parameter Definitions

PARAMETER	VALUE	DEFINITION
no parameter		Enters the ALTBBT sub-level of ALT. If a manual BBT testid is defined, then it gets posted automatically
name of a BBT testid	string of 6 to 12 characters	Enters the ALTBBT sub-level of ALT. The testid name passed in is posted if it is a valid BBT testid name

Responses

The responses are the same as that currently existing in the ALT system. The BBT command has been added such that it is similar to other existing ALT sub-levels. Hence the same responses have been used. Please refer to feature AG0156MM.

Explanation:**System action:****User action:****Notes****Examples****Command name:**Quit**Command type**

MENU command of ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

This command is used to quit from the ALTBBT sub-level.

Warning**Command syntax**

Quit

Parameter definitions**Table 2-148 QUIT Parameter Definitions**

PARAMETER	VALUE	DEFINITION

Responses

None

Response**Explanation:****System action:****User action:****Notes****Examples****Command name: POST****Command type**

MENU command of ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Post a BBT testid at the ALTBBT sub-level.

Warning

N/A

Command syntax

POST [<testid_name>]

Parameter definitions

Table 2-149 POST Parameter Definitions

PARAMETER	VALUE	DEFINITION
no parameter		Display the list of BBT testids in the ALTSCHED table and their status
TESTID_NAME	6 to 12 character string	Name of a tuple of type BBT in table ALTSCHED.

Responses

The responses are the same as that for the POST command at the other existing ALT sub-levels. The only difference is that when no parameters are entered to the command, a list of all the BBT testids in the ALTSCHED table and their status are displayed. Please refer to AG0156MM.

Response 1 (for POST without parameters)

A safe dump is running. All ALT tests with a status of active

or active with faults are currently not testing lines.

The line testing will resume upon completion of the dump.

Testid

Status

=====

Explanation:

The above is displayed for the OST command without parameters. There are no BBT testids in table ALTSCHED.

System action:

None

User action:

Response 2(for POST without parameters)

A safe dump is running. All ALT tests with a status of active

or active with faults are currently not testing lines.

The line testing will resume upon completion of the dump.

Testid

Status

```
=====
```

```
XXXXXXXXXXXXX      aaaaaaaaaaaaaaaaaaaaa
```

```
XXXXXXXXXXXXX      aaaaaaaaaaaaaaaaaaaaa
```

Explanation:

'XXXXXXXXXXXXX' is the TESTID name datafilled in table ALTSCHED. 'aaaaaaaaaaaaaaaaaaaaa' is the status of the testid.

System action:

None

User action**Notes****Examples****Command name:START****Command type**

MENU command of ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Start or prepare a ready testid to be run. The meanings of the various options are given below:

BEGINLINE : Restart testing from the begining.

LASTLINE : Restart testing at the next line after the last line tested in this TESTID.

FULL : The detailed ALT209 log is to be output when all the lines in the TESTID have been tested or when a STOP command is given.

SUMMARY : The summary ALT208 log is to be output when all the lines in the TESTID have been tested or when a STOP command has been given.

VERIFY : Display the list of lines that will be skipped during creation of the database for the TESTID. The skipped lines are those lines that are not BBT testable and 'unassigned lines'. If this option is specified confirmation will be requested before creation of the database.

Warning

N/A

Command syntax

```
START [ <Line start requirements> {BEGINLINE, LASTLINE}]  
      [ <Log output option>      {FULL,      SUMMARY}]  
      [ < Verify skipped lines>   {VERIFY      }]
```

Parameter definitions

Table 2-150 START Parameter Definitions

PARAMETER	VALUE	DEFINITION
Line start requirements	BEGINLINE	Restart testing from the beginning.
	LASTLINE	Restart testing at the next line after the line tested.
Log output option	FULL	Detailed ALT209 is output after completion of the test.
	SUMMARY	Summary ALT208 log is output after completion of the test.
Verify skipped lines	VERIFY	Displays a list of lines that will be skipped during testing.

Responses

Response 1

Nothing posted.

Explanation:

No testid has been posted on the MAP.

System action:

None

User action:

None

Response 2

TESTID is not in “Stopped” status.

Explanation:

The status of the posted ALTSCHED TESTID is not “STOPPED”.

System action:

None

User action:

If the status is “DEFINED” the data has to be submitted before the TESTID can be started. All other statuses do not allow the start command to have any action.

Response 3

TESTID status not valid for START command.

Explanation:

The posted manual TESTID is not in a defined or stopped status and cannot be started.

System action:

None.

User action:

Get the manual TESTID to a defined or stopped status before attempting to start the TESTID

Response 4

Nothing posted.

Explanation:

No testid has been posted on the MAP.

System action:

None

User action:

None

Response 5

Failed to SEND to ALT tester process.

Wait 15 seconds, try again.

Explanation:

The ALT process which fires the manual TESTID is not able to receive the start message.

System action:

None

User action:

The user should wait a few seconds and try again. If this response continues contact the support group.

Response 6

Failed to SEND to ALT driver process.

Wait 15 seconds, try again.

Explanation:

The ALT process which schedules ALTSCHED TESTIDs is not able to receive the start message.

System action:

None

User action:

The user should wait a few seconds and try again. If this response continues contact the support group.

Response 7

xxxx xx xx x xx : SKIPPED

xxxx xx xx x xx : SKIPPED

Please confirm if the database is to be created.

Please confirm YES/NO?

Explanation:

The above is displayed when the VERIFY option is selected. "xxxx xx xx x xx" is the LEN number of the line that will be skipped if the order is BY_LEN. If the order is BY_DN, then the DN number of the skipped line will be displayed. The user is asked to confirm if the database is to be created. Entering 'Y' will cause the database to be created. Entering 'N' will stop execution of START command.

System action:

None

User action:

Enter 'Y' or 'N' to confirm.

Response 8

Please confirm if the database is to be created.

Please confirm YES/NO?

Explanation:

The above is displayed when the user has selected the VERIFY option. There are no skipped lines and hence no lines are displayed. But the user is prompted for a confirmation before creation of the database.

System action:

None

User action:

Enter 'Y' or 'N' to confirm.

Response 9

Database has already been created for this TESTID.

Verify option is not valid.

Explanation:

The database has already been created by for the TESTID. Hence there is no option for the user to check for the skipped lines before creation of the database for the TESTID.

System action:

None

User action:

None

Response 10

xxxxxxxxxxxx is currently being used at other (LCDCUT/SUPDB) MAP levels.

It cannot be started.

Explanation:

The testid is posted at other MAP levels. "xxxxxxxxxxxx" is the name of the testid. The testid will not be started because the user may be operating on the lines in the testid (ex. performing CUT off at the LCDCUT level). Hence it cannot be started.

System action:

None

User action:

Ensure that the testid is not posted at other LCDCUT or BBTSUPDB MAP levels and then execute the START command again.

Response 11

No entry in MTAHORIZ for this set number.

The test cannot be started.

Explanation:

No entry in MTAHORIZ table for the set number specified for this testid. Hence the test will not be started.

System action:

None

User action:

Ensure that the MTAHORIZ table is data-filled to contain the test set information for this set number.

Response 12

The database could not be created for this testid.

Explanation:

The database could not be created for the lines in this TESTID. The error code returned by the database is also displayed. The error may be during allocation of protected store for the lines.

System action:

None

User action:

The creation of database was unsuccessful. Try again. If the problem persists contact support group.

Response 13

Please confirm if the test may be started.

Please confirm 'Y/N??'

Explanation:

This is to confirm that the test is to be started. The database has been created for the testid. If the user now wishes to perform other CUT OFF operations or RUNTST (at BBTSUPDB sub-level MAP) on the lines in the TESTID before performing ABBT, enter 'N' at the prompt. This will stop further execution of the START command. If a 'Y' is entered, then a start message will be sent and ABBT will be performed on the TESTID.

System action:

None

User action:

Enter 'Y' or 'N' to confirm.

Response 14

ALT tester process has acknowledged the start request.

Explanation:

The START command issued for the posted manual TESTID has been acknowledged and the tester is firing up the manual test.

System action:

None

User action:

None

Response 15

Your request has been queued. The ALT tester is busy.

please wait.

Explanation:

The START command issued for the posted manual TESTID has been queued. The ALT process is currently busy processing another request and can take minutes to complete the previous request. The request just queued will then be processed.

System action:

None

User action:

The user should NOT send more starts request. They are ignored as initial requests are processed

Notes**Examples****Command name:**STOP**Command type**

MENU command of ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Stops a running test or a test scheduled to run at its scheduled time span. The status of the testid changes to STOPPED.

Warning**Command syntax**

STOP

Parameter definitions**Table 2-151 STOP Parameter Definitions**

PARAMETER	VALUE	DEFINITION

Responses

The responses are the same as that for the STOP command for the existing ALT MAP sub-levels. Please refer to AG0156MM.

Response**Explanation:****System action:**

User action:**Notes****Examples****Command name:**REMOVE**Command type**

MENU command of ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

The data for the posted TESTID is deleted from the ALTSCHED table if it is a scheduled TESTID. A YES/NO prompt is provided before the action is taken.

If the TESTID is manual, the data for the TESTID is cleared from the MAP.

If the ALL option is used, the data for all the BBT testids in the ALTSCHED table will be deleted.

Warning**Command syntax**

REMOVE [ALL]

Parameter definitions**Table 2-152 REMOVE Parameter Definitions**

PARAMETER	VALUE	DEFINITION
No parameter		Data fro the posted testid will be deleted.

Table 2-152 REMOVE Parameter Definitions

PARAMETER	VALUE	DEFINITION
All BBT testids to be removed	ALL	Data for all the BBT testids in the ALTSCHED table to be deleted.

Responses**Response 1**

Nothing posted.

Explanation:

There is not TESTID currently posted at the MAP.

System action:

None

User action:

None

Response 2

TESTID status must be “Stopped” or “Defined” to remove.

No action taken.

Explanation:

The status of the TESTID is not valid.

System action:

None

User action:

None

Response 3

XXXX will be removed from database.

Please confirm (Y/N)??

Explanation:

This is a warning that manual testid will be deleted.

System action:

None

User action:

Enter 'Y' or 'N'

Response 4

The testid could not be deleted from database.

Explanation:**System action:**

None

User action:

Some internal error, try again. If problem persists, contact support group.

Response 5

Test status must be "STOPPED" to remove.

No action taken.

Explanation:

The status of the testid is not valid for deletion.

System action:

None

User action:

This is a scheduled testid. Ensure that status is "STOPPED"

Response 6

XXXX is currently being used at other (LCDCUT/SUPDB) MAP levels.

It can not be deleted.

Explanation:

The testid is currently being used at other MAP levels.

System action:

None

User action:

Ensure that the testid is not being used at other MAP levels. Other users may be performing LCDCUT/SUPDB operations on testid.

Response 7

XXXX will be deleted from Database and table ALTSCHED.

Please confirm (Y/N) ??.

Explanation:

This is a scheduled testid. The testid information will be deleted from database and ALTSCHED table.

System action:

None

User action:

Enter 'Y' or 'N' for confirmation.

Response 8

All the BBT testids must be stopped before removal.

No action taken.

Explanation:

The status of all the BBT testids in table ALTSCHED must be "STOPPED".

System action:

None

User action:

Ensure that the status of all the BBT testids in table ALTSCHED is "STOPPED".

Response 9

All the BBT testids in ALTSCHED and DATABASE will be removed!!.

Please confirm (Y/N) ??

Explanation:

This is a warning to the user, when the option "ALL" is used.

System action:

None

User action:

Enter 'Y' or 'N'.

Notes**Examples****Command name:**DEFINE**Command type**

MENU command for ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Define the testid information required for a BBT testid. This information includes the test order in which the range will be given, Line ranges (startline and endline of the lines to be tested in the new office), the startline of the corresponding range of lines in the old office, type of BBT test to be performed on these lines and the set number of the test set to be used for testing these lines.

Warning**Command syntax**

```

DEFINE  {ORDER  {DN, LEN} }

        {STARTLEN_NEWOFF <line equipment number>
        ENDLLEN_NEWOFF   <line equipment number>}

        {STARTDN_NEWOFF  <directory number>
        ENDDN_NEWOFF     <directory number>}

        {TEST             {BASIC,START,CLASS,ALL} }

        {SET              <set number> }

        {TIME             <year mth day hr min year mth day hr
                           min>}

```

Parameter definitions

Table 2-153 DEFINE Parameter Definitions

PARAMETER	VALUE	DEFINITION
ORDER	DN	Range will be in directory numbers
	LEN	Range will be in line equipment numbers
STARTDN_NEWOFF	<directory num>	Directory number of startline in new office
STARTLEN_NEWOFF	<line equip num>	Line equipment number of startline in new office
ENDDN_NEWOFF	<directory num>	Directory number of endline in new office
ENDLEN_NEWOFF	<line equip num>	Line equipment number of endline in new office
STARTDN_OLDOFF	<directory num>	Directory number of startline in old office
TEST	BASIC	Perform BASIC test on testid
	START	Perform START test on testid
	CLASS	Perform CLASS test on testid
	ALL	Perform all the above tests on testid
SET	<set number>	Set number of the test set to be used for testing lines in testid
TIME	<yr mth day hr min yr mth day hr min>	Date and time when test is to run, i.e., the starttime and the stoptime for the test

Responses

Response 1

The RANGE has already been defined.

Explanation:

When parameter “order” is re-entered after defining the ‘Startline’ in the new office.

System action:

None

User action:

None

Response 2

TEST ORDER must be defined first.

Explanation:

When the parameter for 'Startline' / 'Endline' in the new office is entered before defining the test order.

System action:

None

User action:

Define the test order first.

Response 3

Enter Startline in the test order specified.

Explanation:

The data for the 'Startline' in the new office has been entered in a different order than what has been specified using the 'Order' parameter..

System action:

None

User action:

If 'Test order' is 'By-DN' then use 'Startdn-newoff' or if 'test order' is 'By-LEN' use 'Startlen-newoff'.

Response 4

Enter Endline in the test order specified.

Explanation:

The data for the 'Endline' in the new office has been entered in a different order than what has been specified using the 'Order' parameter.

System action:

None

User action:

If 'Test order' is 'By-DN' then use 'enddn-newoff' or if 'test order' is 'By-LEN' use 'endlen-newoff'.

Response 5

Conversion of STARTLEN-NEWOFF problem or Conversion of STARTDN-NEWOFF problem.

Explanation:

The CPID of the 'Startline' in the new office could not be determined.

System action:

None

User action:

Ensure that the line is datafilled.

Response 6

The Startline must come sequentially after the Endline.

Explanation:

The 'Startline' in new office must come sequentially before the 'Endline' in the new office.

System action:

None

User action:

Ensure that the condition specified at explanation is met.

Response 7

The maximum number of lines in the testid has exceeded.

The maximum is 500.

Explanation:

The number of lines which is specified by the 'Startline' and 'Endline' in new office is more than 500. This limit has been made to overcome the limitation of logs. The maximum number of lines for which the result can be displayed in the ALT209 detail log is 500.

System action:

None

User action:

Ensure that the lines fall within the range.

Response 8

STARTLINE in new office must be defined first.

This value is ignored.

Explanation:

The user tried to define the 'Endline' in the new office before defining the 'Startline'. This is not accepted.

System action:

None

User action:

None.

Response 9

Conversion of ENDLEN-NEWOFF problem or Conversion of ENDDN-NEWOFF problem.

Explanation:

The CPID of the 'Endline' in the new office can not be determined.

System action:

None

User action:

Ensure line to be data-filled.

Response 10

The TEST ORDER must be defined first.

Explanation:

The user tried to enter the startline in the old office before defining the test order.

System action:

None

User action:

Enter the order using the "order" parameter.

Response 11

STARTLINE in the new office must be defined.

Explanation:

The user tried to enter the startline in the old office before defining the startline in the new office.

System action:

None

User action:

Enter the startline in the new office first.

Response 12

The startline in the old office will be same as startline in new office.

This value is ignored.

Explanation:

If the test order is BY_LEN, both the startline in the new office and the startline in the old office are assumed to be the same. Hence, any value entered by the user for the startline in the old office will be ignored.

System action:

None

User action:

None.

Response 13

The TIME parameter is invalid for manual tests.

Explanation:

The time paramter is invalid for manual tests. Since they are not scheduled.

System action:

None

User action:

None.

Response 14

The STARTTIME is invalid.

Explanation:

The date entered is invalid.

System action:

None

User action:

Enter a vaid date.

Response 15

The STOPTIME is invalid.

Explanation:

The date entered is invalid.

System action:

None

User action:

Enter a valid date.

Response 16

The scheduling time is already past.

Explanation:

The time specified by user is past or over.

System action:

None

User action:

Ensure that the time is after the current time.

Response 17

The STARTTIME is greater than the STOPTIME.

Explanation:

The starttime for the test comes after the stoptime.

System action:

None

User action:

Ensure that the stoptime for the TESTID is after the starttime.

Response 18

The duration for the test is too large.

The maximum is 3 days.

Explanation:

The duration for performing ABBT can be a maximum of 3 days. The duration has been so limited because the maximum number of lines in a TESTID cannot exceed 500 and the time taken will not exceed three days.

System action:

None

User action:

Ensure that the duration is within limits.

Response 19

The startline in new office will be the same as startline in old office.

Explanation:

This is the information displayed when the startline in the new office is entered and the test order is BY_LEN. This is to warn the user that the DN number of the line will be assigned to the startline in the old office.

System action:

None

User action:

None.

Response 20

The STARTLINE cannot be converted to a DN number.

Explanation:

The DN number of the startline in the new office could not be determined. This conversion is done only when the test order is BY_LEN. The conversion is done so as to assign the DN number to the startline in the old office.

System action:

None

User action:

Ensure that the startline in the new office has a valid DN number assigned to it.

Notes**Examples**

Command name:SUBMIT

Command type

MENU command for ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Stores the data for a testid in table ALTSCHED. This is valid only for scheduled tests.

Warning

N/A

Command syntax

SUBMIT

Parameter definitions

Table 2-154 SUBMIT Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

The responses are the same as that for the SUBMIT command at the existing ALT MAP sub-levels. Please refer to AG0156MM.

Explanation:**System action:****User action:****Notes****Examples**

Command name:DEFMAN

Command type

MENU command for ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Create a manual TESTID with the name MANUALxx. There can only be one manual testid per MAP session. 'xx' is the MAP device number. Only QUIT, POST, START, STOP, DEFINE, REMOVE, DEFMAN and STATUS work when the TESTID is manual and not undefined.

Warning

N/A

Command syntax

DEFMAN

Parameter definitions

Table 2-155 DEFMAN Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

The responses are the same as that for the DEFMAN command at the existing ALT sub-levels. Please refer to AG0156MM.

Explanation:**System action:****User action:**

Notes**Examples****Command name:**DEFSCHD**Command type**

MENU command for ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Allows the definition of a new scheduled BBT testid.

Warning

N/A

Command syntax

DEFSCHD <testid name>

Parameter definitions**Table 2-156 DEFSCHD Parameter Definitions**

PARAMETER	VALUE	DEFINITION
name for a scheduled testid	<testid_name> which is a string of 6 to 12 characters	Name for the new scheduled BBT testid to be defined

Responses

The responses are the same as that for the DEFSCHD command of the existing ALT sub-levels. Please refer to AG0156MM.

Response**Explanation:**

System action:**User action:****Notes****Examples****Command name:**STATUS**Command type**

MENU command for ALTBBT

Command target

SUPERNODE

Command availability

RES

Command description

Displays status information for a testid. The information displayed is regarding the BBT test session of the currently posted testid. For the optional parameter ALL, the information regarding all BBT testids is displayed.

Warning

N/A

Command syntax

STATUS [ALL]

Parameter definitions

Table 2-157 STATUS Parameter Definitions

PARAMETER	VALUE	DEFINITION
no paramter		Display information regarding the posted BBT testid.
information regarding all BBT testids	ALL	Display information regarding all the BBT testids in the ALTSCHED table

Responses

Response 1

TESTID: MYTESTID	Test type: Class	State: Active	Order: By-LEN
From line	To line	Last line tested	no of lines
HOST 10 0 1 1	HOST 10 1 19 1	HOST 10 0 5 9	123

BBT test set used:

1. BBTOUT: circuit 0 on TM8 3 11
SD: group number 5 on MTM 6 10
SC: group number 6 on MTM 1 20
MTA: Horizontal 11, Horizontal grp 159

Explanation:

This is the test set information when “STATUS” command without parameters is entered. It includes the datafill information for BBTOUT, SD, SC and MTA.

System action:

None

User action:

None

Response 2

Current status of all BBT test

TESTID: XXXXXXXX	Test type: XXXX	State: XXXX	Order: XXXX
From line	To line	Last line tested	no of lines
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXX

BBT test set used:

1. BBTOUT: circuit X on XXXXX
SD: group number X on XXXXX
SC: group number X on XXXXX
MTA: Horizontal X, Horizontal grp XXX

TESTID: XXXXXX	Test type: XXXX	State: XXXX	Order: XXXX
From line	To line	Last line tested	no of lines
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXX

BBT test set used:

1. BBTOUT: circuit X on XXXXX
SD: group number X on XXXXX
SC: group number X on XXXXX
MTA: Horizontal XX, Horizontal grp XXX

TESTID: XXXXXXXX	Test type: XXX	State: XXX	Order: XXXX
From line	To line	Last line tested	no of lines
XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXX

BBT test set used:

1. BBTOUT: circuit X on XXXX
SD: group number X on XXXXX
SC: group number X on XXXXXXXX
MTA: Horizontal XX, Horizontal grp XXX

Explanation:

Status information for all testids. This is response when "STATUS" command with parameter "ALL" is entered.

System action:

None

User action:

None

Notes**Examples****Alarms****Alarm name:****Conditions required to raise the alarm****Duration of the alarm**

AR0996mm.aa04**Directories****Table of new/modified directories****Table 2-157New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LN_ALT_TOPDIR	Changed		SUPERNODE	RES
ALT_LCDCUT_DIR	New		SUPERNODE	RES

Accessing directory: LN_ALT_TOPDIR**To access**

The command to get to the Map level is “MAPCI; MTC; LNS; ALT”.

To return to CI

The command to get back to CI environment is “QUIT ALL”.

Accessing directory: ALT_LCDCUT_DIR**To access**

The command to get to the Map level is “MAPCI; MTC; LNS; ALT; LCDCUT”.

To return to CI

The command to get back to CI environment is “QUIT ALL”.

Commands

Table of New/modified commands

Table 2-158 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
LCDCUT	NEW		LN_ALT_TOPDIR
QUIT	NEW		ALT_LCDCUT_DIR
POST	NEW		ALT_LCDCUT_DIR
POSTLN	NEW		ALT_LCDCUT_DIR
NEXT	NEW		ALT_LCDCUT_DIR
CORELAY	NEW		ALT_LCDCUT_DIR
HOLDREL	NEW		ALT_LCDCUT_DIR
CUTOFF	NEW		ALT_LCDCUT_DIR
CUTOVER	NEW		ALT_LCDCUT_DIR
AUXPWR	NEW		ALT_LCDCUT_DIR
CUTOVER	NEW		ALT_LCDCUT_DIR
MANCUT	NEW		ALT_LCDCUT_DIR

Command name: LCDCUT

Command type

MENU command of ALT

Command target

SUPERNODE

Command availability

RES

Command description

Goes into the LCDCUT Map level from the ALT Map level.

Warning

N/A

Command syntax**Parameter definitions****Table 2-159**

PARAMETER	VALUE	DEFINITION

Responses**Response 1**

LCDCUT already in use, only one LCDCUT MAP session allowed due to resource limitations.

Explanation:

Not enough resources is available to handle more than one user of the LCDCUT commands, and one user is already in the LCDCUT Map level.

System action:

None

User action:

Find the other user in the LCDCUT Map level and execute LCDCUT commands from there.

Response 2

Failed to allocate event.

Explanation:

The switch does not have sufficient events available for LCDCUT to use. The LCDCUT commands cannot run without these events.

System action:

None

User action:

Contact ETAS. The switch has store problems.

Response 3

The command entered can only be used in the ALT level.

Quit the ALTLCDCUT level first.

Explanation:

This command may only be used from the ALT Map level.

System action:

None

User action:

Quit the LCDCUT level

Response 4

The testid has been defined but no space for this in the Database.

Explanation:

A BBT Manual TESTID is defined, but no database store is allocated for the TESTID.

System action:

None

User action:

From the BBT Map level, issue a START command to create store for the range of lines defined in this Manual TESTID.

Response 5

Cannot allocate ALT_LCDCUT_DIR directory.

REASON_TEXT...

Explanation:

A problem exists in allocating the new CI directory for the LCDCUT commands. The REASON_TEXT.. explains the reason why the directory could not be allocated.

System action:

None

User action:

Contact ETAS. The switch has store problems.

Notes**Examples****Command name:** QUIT**Command type**

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

The standard QUIT command of any Map.

Warning

N/A

Command syntax**Parameter definitions****Table 2-160QUIT Parameter Definitions**

PARAMETER	VALUE	DEFINITION
	nlevels/incrname/ALL	The level to quit

Responses

None

Response**Explanation:****System action:****User action:**

Notes**Examples**

>QUIT ALL

Command name: POST_

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

Post a scheduled BBT testid.

Warning

N/A

Command syntax

Post - Post a BBT TESTID

Parms: [<TESTID>] STRING

Parameter definitions

Table 2-161POST Parameter Definitions

PARAMETER	VALUE	DEFINITION
TESTID	6 to 12 characters	BBT testid to be posted

Responses

Response 1

*** WARNING ****

A safe dump is running. All ALT tests with a status of active or active with faults are currently not testing lines.

The line testing will resume upon completion of the dump.

Explanation:

No parameter is entered for the POST command. Before displaying the BBT TESTIDs defined and their status, the warning is displayed.

System action:

None

User action:

None

Response 2

"MANUAL" is not allowed as part of TESTID.

Explanation:

An attempt is being made to post a manual TESTID.

System action:

None

User action:

None

Response 3

TESTID is 6 to 12 characters.

Explanation:

TESTIDs are 6 to 12 characters long.

System action:

None

User action:

Check entered TESTID and retry.

Response 4

TESTID not found in Database.

Explanation:

An attempt is being made to post a BBT TESTID for which no database store is allocated (If the TESTID has been defined from the BBT Map level using the 'Define' command, then 'Start' command was not issued to create store for this TESTID in the database).

System action:

None

User action:

If the testid has been defined from the BBT Map level, then execute 'Start' command from BBT Map level to create store for this testid in the database.

Response 5

Post not allowed. Manual BBT testid is defined.
First remove testid using "Remove" from BBT level.

Explanation:

An attempt is being made to post a TESTID when a Manual testid is already posted.

System action:

None

User action:

If another testid is required to be posted, then from the BBT Map level using 'Remove' command, remove this manual TESTID.

Notes**Examples**

Command name: POSTLN_

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

Post a line or a set of lines from the posted scheduled BBT testid.

Warning

N/A

Command syntax

Postln - Post a single line from a posted testid

Parms: <OPTION> {L [<SITE> STRING]

<frame> {0 TO 511}

<unit> {0 TO 9}

<DRAWER> {0 TO 99}

<CIRCUIT> {0 TO 99},

D <DN> STRING,

C,

U}

Parameter definitions**Table 2-162POSTLN Parameter Definitions**

PARAMETER	VALUE	DEFINITION
OPTION	L len/D dir-num/C/U	What to post
SITE	Character string	Site name
Frame	0 to 511	Frame number
Unit	0 to 9	Unit number
Drawer	0 to 99	Drawer number
Circuit	0 to 99	Circuit number
DN	digits	Directory Number

Responses**Response 1**

No Testid is Posted.

Explanation:

Trying to post a line from a TESTID without the TESTID being posted.

System action:

None

User action:

Either post a BBT TESTID or define an LCDCUT manual TESTID before executing this command.

Response 2

No valid line exists.

Explanation:

The specified line is not a defined under the posted TESTID.

System action:

None

User action:

None

Notes**Examples**

Command name: NEXT

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

Post the next line from the posted set of lines.

Warning

N/A

Command syntax

Next - Display next line in the posted set

Parameter definitions

No parameters

Table 2-163NEXT Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses**Response 1**

No Testid is Posted.

Explanation:

Trying to post a line from a TESTID without the TESTID being posted.

System action:

None

User action:

Either post a BBT TESTID or define an LCDCUT manual TESTID.

Response 2

Previous successful "Postln C/U" required.

Existing line posted (if any) still valid.

Explanation:

Trying to post the next line without forming a set or the previous "POSTLN C/U" was not successful. If a single line is already posted, commands applicable on a posted line can still be used on this line.

System action:

None

User action:

First form a set of lines using “POSTLN C/U” command.

Response 3

No more lines to post.

Explanation:

All the lines in the posted set have been displayed.

System action:

None

User action:

None

Notes**Examples**

Command name: CORELAY_

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

This is the command to OPERATE/RELEASE/QUERY on lines in the posted testid.

Warning

N/A

Command syntax

CORELAY - Operate the CO relays of a posted Testid.

Parms: <ACTION> {OPERATE <OPTION> {L,

```
T <LOGTYPE> {FULL [<PRINT OPT> {PRINT}}],  
    SUMMARY [<PRINT > {PRINT}]}},  
RELEASE <OPTION> {L,  
    T <LOGTYPE> {FULL [<PRINT OPT> {PRINT}}],  
    SUMMARY [<PRINT > {PRINT}]}},  
QUERY <OPTION> {L,  
    T}}
```

Parameter definitions

No parameters

Table 2-164CORELAY Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response 1

No Testid posted. This command works on a posted

testid - either a BBT testid or LCDCUT testid.

Explanation:

An attempt is being made to execute the command without posting any TESTID.

System action:

None

User action:

Post either a BBT TESTID or define an LCDCUT manual TESTID.

Response 2

Status of posted testid is not STOPPED

OPERATE/RELEASE not allowed.

Explanation:

The TESTID “Status” of the posted TESTID is not “Stopped”. A BBT test may be running on another Map for this TESTID.

System action:

None

User action:

Post the TESTID from the BBT Map level and execute “STOP” command to change the TESTID “Status” to “Stopped”.

Response 3

No Single Line Posted. No operation performed.

Explanation:

An attempt is being made to operate the CO relay on a line which is not posted.

System action:

None

User action:

Using “POSTLN” command post a single line from the posted TESTID.

Response 4

Do you wish to monitor the number of CO relays operated ?

Failure to do so may cause power problems.

Please confirm YES/NO?

Explanation:

Attempting to operate the CO relays on all lines in the posted TESTID. If the number of CO relays operated exceeds the threshold of 32 per drawer or 125 per LCM, this can cause the power converter to trip. The user is being prompted to know if the CO relay operation is to be stopped when the threshold is reached.

System action:

None

User action:

Enter ‘YES’ if the CO relay operation is to be stopped when the threshold is reached. Enter ‘NO’ if the CO relay operation is to continue even if the threshold is reached.

Response 5

CO relay for the line successfully operated.

Explanation:

The attempt to operate the CO relay for the posted line was successful.

System action:

None

User action:

None

Response 6

CO relay for the line successfully released.

Explanation:

The attempt to release the CO relay for the posted line was successful.

System action:

None

User action:

None

Response 7

Invalid LCD.

Explanation:

The LCD for the line on which CO relay OPERATE/RELEASE is being attempted is not any of the following:

- LM
- LCM
- ILCM
- SRU
- LCME

System action:

None

User action:

None

Response 8

Drawer used for RSM/ESA.

Explanation:

The drawer number is 19 for the line on which a CO relay operation is being performed. However this drawer on the LCD is an RSM and therefore has no such lines.

System action:

None

User action:

None

Response 9

Invalid drawer number.

Explanation:

The drawer number for the line on which a CO relay operation is being performed is greater than the maximum number of drawers for this LCD type.

System action:

None

User action:

None

Response 10

Invalid card code.

Explanation:

The card code of the line on which a CO relay operation is being performed is not a valid LCDCUT card code. It is one of the following:

- CD2X03AA
- CD6X20AA
- CD6X23AA
- CD6X99AA

System action:

None

User action:

None

Response 11

Non WLCs not supported on SRU or LCME.

Explanation:

The line on which the CO relay operation is being performed is a WLC on either an SRU or LCME.

System action:

None

User action:

None

Response 12

Failed to get resources.

Explanation:

More than one LCDCUT session is in progress. While trying to get the LCM CO relay count flag an error occurred. Because of this we cannot attempt to update the CO relay counts for this line.

System action:

None

User action:

Contact ETAS. The switch has available store problems.

Response 13

DRW limit 32 Non WLC lines CO relays operated.

Explanation:

The drawer limit has been reached for the CO relays OPERATE. 32 Non WLC CO relays have already been operated for this drawer. No auxiliary power supply is available for this LCM. Therefore, the CO relay operate for this line is not permitted.

System action:

None

User action:

Either add an auxiliary power supply to this LCM or release the CO relays on some of the Non WLC lines on this drawer for the LCM.

Response 14

DRW limit 64 CO relays operated.

Explanation:

The drawer limit has been reached for the CO relays OPEARTE. 64 Non WLC CO relays have already been operated for this drawer. No auxiliary power supply is available for this LCM. Therefore, the CO relay operate for this line is not permitted.

System action:

None

User action:

Either add an auxiliary power supply to this LCM or release the CO relays on some of the Non WLC lines on this drawer for the LCM.

Response 15

LCM limit 125 Non WLC lines CO relays operated.

Explanation:

The LCM threshold limit is reached. 125 Non WLC CO relays are already operated for this LCM. No auxiliary power supply is available for this LCM. Therefore, the CO relay operate for this line is not permitted.

System action:

None

User action:

Either add an auxiliary power supply to this LCM or release the CO relays on some of the Non WLC lines for this LCM.

Response 16

LCM limit 640 CO relays operated.

Explanation:

The LCM threshold limit is reached. The LCM has an auxiliary power supply connected and 640 CO relays are already operated for this LCM.

System action:

None

User action:

Release the CO relays on some of the Non WLC lines for this LCM.

Response 17

SRU limit 256 CO relays operated.

Explanation:

CO relays operated threshold reached for the SRU on which the line exists.
256 CO relays are already operated for this LCD.

System action:

None

User action:

Release the CO relays for some of the lines on this LCD.

Response 18

LCME limit 512 CO relays operated.

Explanation:

CO relays operated threshold reached for the LCME on which the line exists.
512 CO relays are already operated for this LCD.

System action:

None

User action:

Release the CO relays for some of the lines on this LCD.

Response 19

Line not seized.

Explanation:

The line for which the CO relay operation is being performed could not be seized.

System action:

None

User action:

Check the state of this line and change the state of this to either IDL or CUT.

Response 20

ERROR_REASON_TEXT..

CO relay(s) operation stopped.

Explanation:

The CO relays operated threshold limit has been reached while trying to operate all the CO relays for the posted TESTID. Therefore the operation cannot be continued further. The ERROR_REASON_TEXT.. indicates which threshold is reached.

System action:

None

User action:

Depending on the ERROR_REASON_TEXT., either add an auxiliary power supply for the specified LCD or release some of the non WLC CO relays on the affected drawer of the LCD.

Response 21

LEN	DN	Result
=====		
SSSS FF UU DD CC	NNNNNNNN	XXXXX
SSSS FF UU DD CC	NNNNNNNN	XXXXX
SSSS FF UU DD CC	NNNNNNNN	XXXXX

Explanation:

The user has specified a PRINT option along with the CORELAY command. The result of the CO relay operation is displayed for each line of the posted TESTID. SSSS FF UU DD CC represents the site, frame, unit, drawer and circuit (the LEN), and NNNNNNNN represents the DN for the line and XXXXX represents the result of the operation. XXXXX can be any one of the following:

- Operated - Relay operated
- NOT Operated - Relay not operated
- Released - Relay released
- NOT Released - Relay not released

System action:

None

User action:

None

Response 22

Operate NOT successful on all lines in posted
testid.

Explanation:

When operating the CO relays for all lines in the posted testid, there was atleast one line on which the operate was not successful.

System action:

None

User action:

None

Response 23

Operate successful on all lines in posted testid.

Explanation:

The CO relay operate was successful on all the lines in the posted testid.

System action:

None

User action:

None

Response 24

Release NOT successful on all lines in posted
testid.

Explanation:

When releasing the CO relays for all lines in the posted testid, there was atleast one line on which the release was not successful. The ALT 309 log, if generated, details the error.

System action:

None

User action:

None

Response 25

Release successful on all lines in posted testid.

Explanation:

The CO relay release operation was successful on all the lines in the posted testid.

System action:

None

User action:

None

Response 26

No LTE is available for use.

Explanation:

An LTE is required to perform the NOBTST, however no LTE is available to perform the test

System action:

None

User action:

Ensure there is an LTE available to service the line and ensure that the LTE is correctly installed.

Response 27

Failed to seize LTE: Lte_id.

Explanation:

An LTE is required to perform the Query (i.e. No Battery Test) on the line, however the LTE could not be seized.

The Lte_id is the CLLI of the LTE which was to be seized.

System action:

None

User action:

Ensure the LTE is correctly installed.

Response 28

Vertical busy - Do you want to wait 40 seconds?

Please confirm YES/NO?

Explanation:

A vertical connection is required to perform the Query (i.e. No Battery Test) on the line, however the vertical required is busy for other reasons. The user is asked if they want to wait up to 40 seconds in order to seize the vertical.

System action:

None

User action:

Enter YES if should try to seize the vertical again. Enter NO if should not try to seize the vertical again and the command should be terminated.

Response 29

MTA connect failure: xxx

Explanation:

A vertical connection is required to perform the Query (i.e. No Battery Test) on the line, however the vertical required was not obtained.

Where xxx is the error return code.

System action:

None

User action:

Ensure the vertical required to service the LCD is available.

Response 30

MTA disconnect failure: xxx

Explanation:

A vertical connection was required to perform the NOBTST, however the vertical required could not be released properly.

Where xxx is the error return code.

System action:

None

User action:

Ensure the vertical required to service the LCD has been released.

Response 31

MODULE	DRWRNO	LINENO	STATUS	RINGVOLTS	TIPVOLTS
SSSS FF U	DD	CC	TTTT	XXXXXX	YYYYY
SSSS FF U	DD	CC	TTTT	XXXXXX	YYYYY

Explanation:

This response is generated as a result of running the “CORELAY QUERY T” command on a line or group of lines. Where SSSS FF U is the site, frame and unit of the LCD. DD is the drawer the line is in and CC is the circuit number of the line. TTTT is the status of the CO relay on the line which can be either:

- OK - CO relay operated
- FAIL - CO relay not operated
- NEQ - line is NEQ, CO relay not checked
- SKIP - line is a power card or a bert card, CO relay not checked
- STATE - line in incorrect state, CO relay not checked
- Blank - test equipment failure, CO relay not checked.

XXXXXX is the ringing voltage measured and, YYYYYY is the tip voltage measured.

System action:

None

User action:

None

Response 32

Wait for LTE result failed, LTE: Lte_id.

Explanation:

The Query (i.e. No Battery test) on the line failed to run on a line due to an invalid LTE result. The Lte_id is the CLLI of the LTE which was being used.

System action:

None

User action:

Check the LTE.

Response 33

Invalid LTE result, LTE: Lte_id. Test above line again.

Explanation:

The Query (i.e. No Battery test) on the line failed to run on a line due to an invalid LTE result. The Lte_id is the CLLI of the LTE which was being used.

System action:

None

User action:

Check the LTE.

Response 34

Failed to setup line teleport block.

Explanation:

A line teleport block was not obtained in order to communicate with the line to perform the Query (i.e. No Battery Test) on the line.

System action:

None

User action:

Retest the line.

Notes**Examples**

Post a BBT TESTID. Using POSTLN post a single line specified by its LEN. Operate the CO relay for the posted line. Query its status.

```
>POST EXAMPLETSTID
>POSTLN L 00 01 10 11
>CORELAY OPEARTE L
>CORELAY QUERY L
MODULE   DRWRNO  LINENO  STATUS  RINGVOLTS  TIPVOLTS
HOST 00 01    10       11    OK         0         0
```

```
>CORELAY OPERATE T SUMMARY PRINT
```

```
LEN      DN      Result
```

```
=====
```

```
HOST 01 0 00 6211134 Operated
HOST 01 0 01 6213154 Operated
HOST 01 0 03 6223476 Not Operated
```

Command name: HOLDREL**Command type**

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

This is the command to perform operations on the HOLDREL of a drawer.

Warning

N/A

Command syntax

HOLDREL - Operate/Release/Query HOLD relay(s) on LM or LCM

```
Parms: <ACTION> {OPERATE [<SITE> STRING]
                    <frame> {0 TO 511}
                    <unit> {0 TO 9}
                    [<DRAWER> {0 TO 99}],
        RELEASE [<SITE> STRING]
                    <frame> {0 TO 511}
                    <unit> {0 TO 9}
                    [<DRAWER> {0 TO 99}],
        QUERY  [<SITE> STRING]
                    <frame> {0 TO 511}
                    <unit> {0 TO 9}
                    [<DRAWER> {0 TO 99}]}
```

Parameter definitions

Table 2-165HOLDREL Parameter Definitions

PARAMETER	VALUE	DEFINITION
Action	OPERATE/RELEASE/QUERY	The action to be performed.
Site	Character string	Site name
frame	0 to 511	Frame number
unit	0 to 9	Unit number
drawer	0 to 99	Drawer number

Responses

Response 1

Must specify physical drawer of 64 lines on LCM.

Type in even drawer number of pair.

Explanation:

The user has entered a drawer id (i.e. site frame unit and drawer number). The drawer number is an odd number and the LCD for the drawer is either LCM, ILCM, LCME or SRU. An odd drawer number is not allowed since one physical drawer for these LCDs consists of 2 logical drawers (i.e. 0/1, 2/3, etc..) and each drawer has 64 lines.

System action:

None

User action:

Enter an even drawer number.

Response 2

LCD is out of service.

Explanation:

The specified LCD's lines are not serviceable.

System action:

None

User action:

Check the LCD.

Response 3

Warning: This command may cause some lines in specified drawer(s) to be cut off.

Please confirm YES/NO?

Explanation:

The user is trying to operate the HOLD relay on a drawer (or on all drawers) of an LCD. When the HOLD relay is operated, it cuts off all the lines in the drawer(s). Hence this warning is displayed.

System action:

None

User action:

Enter 'YES' to go ahead with the operate, "NO" to stop the operate.

Response 4

Drawer xx is unequipped, HOLD relay operation not attempted.

Explanation:

Attempting to operate the HOLD relay for a drawer that is not equipped. Where xx is the drawer number.

System action:

None

User action:

Check the drawer.

Response 5

Operated HOLD relay in drawer xx.

Explanation:

The HOLD relay for the drawer specified by 'xx' was operated successfully.

System action:

None

User action:

None

Response 6

Operation successful in specified equipped drawer(s).

Explanation:

The HOLD relay was successfully operated on the drawer(s) on which the operation was attempted.

System action:

None

User action:

None

Response 7

Failed to operate HOLD relay in drawer xx.

Explanation:

The attempt to operate the HOLD relay for drawer 'xx' was not successful. If operating HOLD relays for all the drawers in the LCD, the ALT 306 log describes the error reason.

System action:

None

User action:

None

Response 8

Drawer xx is unequipped, HOLD relay release not attempted.

Explanation:

The drawer 'xx' is not equipped and hence the release on its HOLD relay was not attempted. If operating HOLD relays for all the drawers in the LCD, the ALT 306 log generated describes the error reason.

System action:

None

User action:

Check drawer 'xx'.

Response 9

Failed to release HOLD relay in drawer xx.

Explanation:

The HOLD relay on drawer 'xx' could not be released.

System action:

None

User action:

None

Response 10

Operation successful in specified equipped drawer(s).

WARNING: Straps assumed to be off.

Explanation:

The HOLD relay was released successfully on the drawer(s) on which the operation was attempted. If operating HOLD relays for all the drawers in the LCD, the ALT 306 log is generated to record the results.

System action:

None

User action:

None

Response 11

	MODULE	DRAWERNO	HELD
SSSS	FF U	N	AA
SSSS	FF U	N	AA
SSSS	FF U	N	AA
MORE...			

Explanation:

This is the result of the query on the HOLD relay of the drawers of an LCD. Where SSSS is the site, FF is the frame, U is the unit, N is the drawer number and AA is the status result. AA can be any one of the following:

- NO - HOLD relay not operated
- YES - HOLD relay operated
- NEQ - Not equipped

System action:

None

User action:

None

Notes**Examples**

- Operate the HOLD relays of the drawers of an LCD.

```
>HOLDrel operate host 00 01
```

Warning: This command may cause some lines in
specified drawer(s) to be cut off.

Please confirm ("YES", "Y", "NO", or "N"):

```
>y
```

Operated HOLD relay in drawer 0.

Operated HOLD relay in drawer 2.

Operated HOLD relay in drawer 4.

Operated HOLD relay in drawer 6.

Drawer 8 is unequipped, HOLD relay operation not attempted.

MORE...

- Query status of HOLD relays of drawers in an LCD.

```
>HOLDrel query host 00 01
```

	MODULE	DRAWERNO	HELD
HOST	00 1	0	YES
HOST	00 1	2	YES
HOST	00 1	4	NO
HOST	00 1	6	NEQ

MORE...

Command name: CUTOFF_**Command type**

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

This command cuts off lines (i.e. operates the CO relays of all the lines) in the specified drawer(s).

Warning

N/A

Command syntax

CUTOFF - Perform CUTOFF with HOLD on an LM or LCM

Parms: [<SITE> STRING]
 <frame> {0 TO 511}
 <unit> {0 TO 9}
 [<DRAWER> {0 TO 99}]

Parameter definitions

Table 2-166CUTOFF Parameter Definitions

PARAMETER	VALUE	DEFINITION
Site	Character string	Site name
frame	0 to 511	Frame number
unit	0 to 9	Unit number
drawer	0 to 99	Drawer number

Responses

Response 1

***** Warning *****

Logs for a maximum of only 17 drawers would be
generated. Alright to proceed?

Explanation:

The user has specified a CUTOVER operation on mor than 17 drawers in the LCD. Because of log space constraints, ALT 307 logs for only 17 drawers would be generated.Enter ‘YES” to proceed with CUTOVER, “NO” to stop the operation.

System action:

None

User action:

None

Response 2

WARNING: Cutoff ineffective on drawer xx.

WARNING: Cutoff ineffective on drawer xx.

HOLD relay(s) must be operated.

Do you wish to execute the CUTOFF command regardless?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

The HOLD relay for the drawer 'xx', and 'yy' are not operated. Trying to operate the CO relays for all the lines in the drawer(s) without the HOLD relay for the drawer(s) being operated can cause the power converter to trip. Enter "YES" to go ahead, "NO" to quit. If 'YES' was answered, an ALT 307 log is generated to record the results of the cut off.

System action:

None

User action:

Operate the HOLD relays for the displayed drawers which do not have their HOLD relay operated.

Notes**Examples**

Command name: CUTOVER_

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

This command releases the HOLD relay(s) on the specified drawer(s) and all the CO relays in the drawer(s).

Warning

N/A

Command syntax

CUTOVER - Release CO and HOLD relays on an LM or LCM

Parms: [<SITE> STRING]
 <frame> {0 TO 511}
 <unit> {0 TO 9}
 [<DRAWER> {0 TO 99}]

Parameter definitions

Table 2-167CUTOVER Parameter Definitinos

PARAMETER	VALUE	DEFINITION
Site	Character string	Site name
frame	0 to 511	Frame number
unit	0 to 9	Unit number
drawer	0 to 99	Drawer number

Responses

Response 1

***** Warning *****

Logs for a maximum of only 17 drawers would be generated. Alright to proceed?

Explanation:

The user has specified a CUTOVER operation on mor than 17 drawers in the LCD. Because of log space constraints, ALT 307 logs for only 17 drawers would be generated. Enter ‘YES” to proceed with CUTOVER, “NO” to stop the operation.

System action:

None

User action:

None

Response 2

LCD is out of service.

Explanation:

The specified LCD's lines are not serviceable.

System action:

None

User action:

Check the LCD.

Response 3

Must specify physical drawer of 64 lines on LCM.

Type in even drawer number of pair.

Explanation:

The user has entered a drawer id (i.e. site frame unit and drawer number). The drawer number is an odd number and the LCD for the drawer is either LCM, ILCM, LCME or SRU. An odd drawer number is not allowed since one physical drawer for these LCDs consists of 2 logical drawers (i.e. 0/1, 2/3, etc..) and each drawer has 64 lines.

System action:

None

User action:

Enter an even drawer number.

Response 4

Drawer xx is unequipped, HOLD relay release not attempted.

Explanation:

The drawer 'xx' is not equipped and hence the release on its HOLD relay was not attempted.

System action:

None

User action:

Check drawer 'xx'.

Response 5

Failed to release HOLD relay in drawer xx.

Explanation:

The HOLD relay on drawer 'xx' could not be released.

System action:

None

User action:

None

Response 6

Operation successful in specified equipped drawer(s).

Explanation:

The HOLD relay was successfully released in the specified drawer(s). If all drawers in the LCD was specified, an ALT 307 log is generated to record the results.

System action:

None

User action:

None

Notes**Examples**

Command name: AUXPWR_

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

The command to auxiliary power supply to an LCM.

Warning

N/A

Command syntax

AUXPOWER - Add/Remove/Query LCM auxiliary power supply

```
Parms: [<ADDREM> {ADD [<SITE> STRING]
           <frame> {0 TO 511}
           <unit> {0 TO 9},
        REMOVE [<SITE> STRING]
           <frame> {0 TO 511}
           <unit> {0 TO 9}}]
```

Parameter definitions**Table 2-168AUXPWR Parameter Definitions**

PARAMETER	VALUE	DEFINITION
ADDREM	ADD/REMOVE	Add or remove auxiliary power
Site	Character string	Site name
frame	0 to 511	Frame number
unit	0 to 9	Unit number
drawer	0 to 99	Drawer number

Responses**Response 1**

Only LCMs can have an auxiliary power supply.

Explanation:

An attempt is being made to add auxiliary power supply to a non-LCM LCD.

System action:

None

User action:

Check the LCD id.

Response 2

LCM SSSS FF UU is expected to have an auxiliary power supply connected.

Explanation:

The threshold limits i.e. number of CO relays that can be operated in this LCM and in the drawers, is increased, so that all the CO relays can be operated for that LCM without having any power converter tripping problems.

System action:

None

User action:

None

Response 3

CO relay count flag not obtained.

Auxiliary power supply cannot be removed.

Explanation:

The LCM count flag could not be obtained. This can cause a race condition when two Map sessions are simultaneously trying to update these counts.

System action:

None

User action:

Contact ETAS. The switch has store problems.

Response 4

nn CO relays on Non - World Line cards,
are currently operated on this LCM.
auxiliary power supply can be removed.

Explanation:

The user is trying to remove the auxiliary power supply to an LCM in which more than 125 non WLC relays on an LCM are already operated. Hence the auxiliary power supply to this LCM cannot be removed.

System action:

None

User action:

Release some of the CO relays on non WLCs on the LCD.

Response 5

The number of CO relays operated on Non - World

Line Cards for the following physical drawers

exceeds the default value allowed

without an auxiliary power supply.

This number must be reduced to or below 'aa' before the
auxiliary power supply can be removed.

Physical drawer nn has xx CO relays operated.

Explanation:

The LCM for which the auxiliary power supply is being removed has 'xx' number of CO relays operated in drawer number 'nn'. This number is greater than the threshold limit for the drawer. Hence the remove is not permitted.

System action:

None

User action:

Release some of the CO relays on the drawer(s) specified in the display.

Response 6

LCM SSSS FF UU auxiliary power supply has been removed.

Explanation:

The auxiliary power for the LCM was removed successfully.

System action:

None

User action:

None.

Response 7

*****WARNING*****

The following LCMs are expected to have an
auxiliary power supply connected.

LCM SSSS FF UU

Explanation:

The list of LCM expected to have an auxiliary power supply is displayed.

System action:

None

User action:

None

Response 8

No auxiliary power supplies are setup.

Explanation:

None of the LCMs are expected to have auxiliary power supply connected.

System action:

None

User action:

None

Notes**Examples**

Command name: MANCUT_

Command type

MENU command of LCDCUT.

Command target

SUPERNODE

Command availability

RES

Command description

The command to define an LCDCUT manual TESTID.

Warning

N/A

Command syntax

MANUALCT - Define a dummy manual testid

```

Parms: <Test Order> {BYLEN <Start LEN> {START [<SITE>] STRING
                                     <frame> {0 TO 511}
                                     <unit> {0 TO 9}
                                     <DRAWER> {0 TO 99}
                                     <CIRCUIT>
{0 TO 99}}
                                     [<End LEN> {END [<SITE>] STRING
                                     <frame> {0 TO 511}
                                     <unit> {0 TO 9}
                                     <DRAWER> {0 TO 99}
                                     <CIRCUIT> {0 TO 99}},
BYDN <Start DN> {START <DN> STRING}
[<End DN> {END <DN> STRING}]]

```

Parameter definitions

Table 2-169MANCUT_ Parameter Definitions

PARAMETER	VALUE	DEFINITION
Test Order	BYLEN/BYDN	The test order for the range of lines.
Start LEN	START	Following line is start of the range
Site	Character string	Site name
frame	0 to 511	Frame number
unit	0 to 9	Unit number
drawer	0 to 99	Drawer number
End LEN	END	Following line is end of the range
Site	Character string	Site name
frame	0 to 511	Frame number
unit	0 to 9	Unit number
drawer	0 to 99	Drawer number
Start DN	START	Following line is start of the range
DN	Character string	The digits of the DN
End DN	END	Following line is end of the range

Responses

Response 1

Invalid range. Number of lines in range exceeds 500

Explanation:

The user is trying to define a range of lines that contains more than 500 lines. Because of log space constraints for ALT 309 log, a maximum of 500 lines can be defined for a testid.

System action:

None

User action:

Enter a range that has less than 500 lines.

Response 2

ERROR : Startline and endline are of different sizes.

Explanation:

The start DN and end DN of the range specified have different number of digits. Both the start DN and end DN should contain same number of digits.

System action:

None

User action:

Check the DN range.

Response 3

ERROR : Startline is greater than the endline.

Explanation:

The start DN in the range of lines defined is greater than the end DN defined. The end DN in the range should be greater than the start DN.

System action:

None

User action:

Check the range of lines.

Response 4

Could not convert STARTLEN to start cpid.

Explanation:

An error occurred while converting the start LEN of the range specified into CPID.

System action:

None

User action:

Check the start line.

Response 5

Could not convert ENDLEN to end cpid.

Explanation:

An error occurred while converting the end LEN of the range specified into CPID.

System action:

None

User action:

Check the end line.

Response 6

STARTLEN is not datafilled.

Explanation:

Improper/No data-filling exists for the start LEN in the range specified.

System action:

None

User action:

Check the data-filling for the start LEN of the range.

Response 7

ENDLEN is not datafilled.

Explanation:

The end LEN of the range specified has no/improper data-filling.

System action:

None

User action:

Check the data-filling for the end LEN of the range.

Response 8

The STARTLEN entered comes sequentially after the ENDLEN entered.

Explanation:

The start LEN in the range specified is sequentially greater than the end LEN in the range.

System action:

None

User action:

Check the range of the LENs specified.

Response 9

Could not create database for the testid.
No valid line exists in given range.

Explanation:

The database for the range of lines specified could not be created because there were no BBT testable lines (pots lines) in the range specified.

System action:

None

User action:

Check the range of lines specified.

Response 10

Testid already exists. Overwriting with new testid..

Explanation:

An LCDCUT Manual testid is already defined for a range of lines. Another Manual testid is being defined for a different range of lines. The previous testid is being replaced by the new one in the database.

System action:

None

User action:

None, just information

Notes

The range of lines for an LCDCUT manual TESTID should not exceed 500 lines.

Examples

>MANCUT BYDN START 6211100 END 6211500

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AR0997mm.ab01

Directories

Table of new/modified directories

Table 2-170 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LN_ALT_TOPDIR	Changed		SUPERNODE	RES
ALT_BBTSUPDB_DIR	New		SUPERNODE	RES

Accessing directory: LN_ALT_TOPDIR

To access

The command to get to the Map level is “MAPCI; MTC; LNS; ALT”.

o return to CI

The command to get back to CI environment is “QUIT ALL”.

Accessing directory: ALT_BBTSUPDB_DIR

To access

The command to get to the Map level is “MAPCI; MTC; LNS; ALT; BBTSUPDB”.

To return to CI

The command to get back to CI environment is “QUIT ALL”.

Commands

Table of New/modified commands

Table 2-171 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
BBTSUPDB	NEW		LN_ALT_TOPDIR
QUIT	NEW		ALT_BBTSUPDB_DIR

Table 2-171 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
POST	NEW		ALT_BBTSUPDB_DIR
POSTLN	NEW		ALT_BBTSUPDB_DIR
NEXT	NEW		ALT_BBTSUPDB_DIR
GENREP	NEW		ALT_BBTSUPDB_DIR
MAPDN	NEW		ALT_BBTSUPDB_DIR
RUNTST	NEW		ALT_BBTSUPDB_DIR
CONTINUE	NEW		ALT_BBTSUPDB_DIR

Command name: BBTSUPDB**Command type**

MENU command of ALT

Command target

SUPERNODE

Command availability

RES

Command description

Goes into the BBTSUPDB Map level from the ALT Map level.

Warning

N/A

Command syntax

Parameter definitions

Table 2-172BBTSUPDB Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response 1

The command entered can only be used in the ALT level.
Quit the ALTBOTSUPDB level first.

Explanation:

This command may only be used from the ALT Map level.

System action:

None

User action:

Quit the BBTSUPDB level.

Response 2

The testid has been defined but no space
for this in the Database.

Explanation:

A BBT Manual TESTID is defined, but no database store is allocated for the TESTID.

System action:

None

User action:

From the BBT Map level, issue a START command to create store for the range of lines defined in this Manual TESTID.

Response 3

Cannot allocate ALT_BBTSUPDB_DIR directory.
REASON_TEXT...

Explanation:

A problem exists in allocating the new CI directory for the BBTSUPDB commands. The REASON_TEXT explains the reason why the directory could not be allocated.

System action:

None

User action:

Contact ETAS. The switch has store problems.

Notes**Examples**

Command name: POST_

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

Post a scheduled BBT testid.

Warning

N/A

Command syntax

Post - Post a BBT TESTID

Parms: [<TESTID>] STRING

Parameter definitions

Table 2-173POST Parameter Definitions

PARAMETER	VALUE	DEFINITION
TESTID	6 to 12 characters	BBT testid to be posted

Responses

Response 1

*** WARNING ****

A safe dump is running. All ALT tests with a status of active or active with faults are currently not testing lines. The line testing will resume upon completion of the dump.

Explanation:

No parameter is entered for the POST command. Before displaying the BBT TESTIDs defined and their status, the warning is displayed.

System action:

None

User action:

None

Response 2

"MANUAL" is not allowed as part of TESTID.

Explanation:

An attempt is being made to post a manual TESTID.

System action:

None

User action:

None

Response 3

TESTID is 6 to 12 characters.

Explanation:

TESTIDs are 6 to 12 characters long.

System action:

None

User action:

Check entered TESTID and retry.

Response 4

TESTID not found in Database.

Explanation:

An attempt is being made to post a BBT TESTID for which no database store is allocated (If the TESTID has been defined from the BBT Map level using the 'Define' command, then 'Start' command was not issued to create store for this TESTID in the database).

System action:

None

User action:

If the testid has been defined from the BBT Map level, then execute 'Start' command from BBT Map level to create store for this testid in the database.

Response 5

Post not allowed. Manual BBT testid is defined.
First remove testid using "Remove" from BBT level.

Explanation:

An attempt is being made to post a TESTID when a Manual testid is already posted.

System action:

None

User action:

If another testid is required to be posted, then from the BBT Map level using 'Remove' command, remove this manual TESTID..

Notes**Examples**

Command name: QUIT

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

The standard QUIT command of any Map.

Warning

N/A

Command syntax**Parameter definitions**

Table 2-174QUIT Parameter Definitions

PARAMETER	VALUE	DEFINITION
	nlevels/incrname/ALL	

Responses

None

Response**Explanation:****System action:****User action:****Notes****Examples**

Command name: POSTLN_

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

Post a line or a set of lines from the posted scheduled BBT testid.

Warning

N/A

Command syntax

Postln - Post a single line from a posted testid

```
Parms: <OPTION> {L [<SITE> STRING]
                <frame> {0 TO 511}
                <unit> {0 TO 9}
                <DRAWER> {0 TO 99}
                <CIRCUIT> {0 TO 99},
                D <DN> STRING,
                F [<4 DIGIT ERROR CODE> STRING],
                U}
```

Parameter definitions

Table 2-175POSTLN Parameter Definitions

PARAMETER	VALUE	DEFINITION
OPTION	L len/D dir-num/U/F/ F four letter failure code	What to post

Responses

Response 1

No Testid is Posted.

Explanation:

Trying to post a line from a TESTID without the TESTID being posted.

System action:

None

User action:

Either post a BBT TESTID or define an BBTSUPDB manual TESTID before executing this command.

Response 2

No valid line exists.

Explanation:

The specified line is not a defined under the posted TESTID.

System action:

None

User action:

None

Notes**Examples**

Command name: NEXT

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

Post the next line from the posted set of lines.

Warning

N/A

Command syntax

Next - Display next line in the posted set

Parameter definitions

Table 2-176NEXT Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response 1

No Testid is Posted.

Explanation:

Trying to post a line from a TESTID without the TESTID being posted.

System action:

None

User action:

Either post a BBT TESTID or define an BBTSUPDB manual TESTID.

Response 2

No more lines to post.

Explanation:

All the lines in the posted set have been displayed.

System action:

None

User action:

None

Notes

Examples

Command name: MapDN

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

To set/change one/some/all the old office Directory Numbers of lines defined against a testid in the database

Warning

N/A

Command syntax

MapDN - Change the old office Directory number

```
Parms: <Option>{DN <DN> STRING {<N/ALL option> { N<No. lines>
STRING [<print opt>{PRINT}]}}},
                                     ALL [<print
opt>{PRINT}] },
                                     MATCH {<N/ALL option> { N <No. lines>
STRING [<print opt>{PRINT}]}}},
                                     ALL [<print opt>{PRINT}] },
```

Parameter definitions

Table 2-177MapDN Parameter Definitions

PARAMETER	VALUE	DEFINITION
Option	DN	To change the old office DN to DNnum entered
	MATCH	To change the old office DN to the new office DN
DN	String	To change the old office DN to this DNnum
N/ALL option	N/ALL	Indicates the next parameter is the number of lines to be changed. Change all the lines starting from the beginning to the end of dat
No. lines	Integer	The number of DN lines to be changed starting from the current posted line - 1 to 500
Print opt	PRINT	To display the old office and the new office DN

Responses

Response 1

Invalid map index.

Explanation:

The maximum number of ALT map levels (64) has exceeded.

System action:

None

User action:

Retry after some time.

Response 2

No testid defined.

Explanation:

Trying to change the old office DN when the testid is not defined. A testid has to be defined before doing a MapDn.

System action:

None

User action:

Define a testid using DEFINE command .

Response 3

MapDN: Testid status should be STOPPED

Explanation:

Trying to change the old office DN when the test is not in stopped state.

System action:

None

User action:

Bring the testid to stopped status by giving a STOP command at BBT

Response 4

No line posted

Explanation:

No lines posted and trying to change the old office DN for the posted line.

System action:

None.

User action:

Post a line using the command PostLN.

Response 5

MapDn MATCH <nnn>: Test Order by DN required.

Explanation:

Only if the testid has been defined by DN, we can do the match operation.

System action:

None

User action:

Use MapDN DN option.

Notes**Example**

Command name: RUNTEST

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

To run the BBT test on a single posted line.

Warning

N/A

Command syntax

RunTST - Run BBT test on the posted line

Parms: <TestType> {BASIC [<Pause Type> {SCAN,
RELAY}}],

```
START [<Pause Type> {SCAN,  
                     RELAY}},  
CLASS [<Pause Type> {SCAN,  
                     RELAY}},  
ALL  [<Pause Type> {SCAN,  
                     RELAY}}}
```

Parameter definitions

Table 2-178RUNTEST Parameter Definitions

PARAMETER	VALUE	DEFINITION
TestType	BASIC	To run BBT BASIC Test only
	START	To run BBT START test only
	CLASS	To run BBT CLASS test only
	ALL	To run all BBT tests
Pause Type	RELAY	To suspend the test whenever a relay is operated
Pause Type	SCAN	To suspend the test whenever a scan is performed

Responses

Response 1

No Single Line Posted.

Explanation:

Trying to test when no line has been posted for testing from this MAP session.

System action:

None

User action:

First post a line for test using POSTLN.

Response 2

Failed to SEND to ALT tester process.

Wait 15 seconds, try again

Explanation:

The system has problems in sending messages to one of the processes and hence the test is not starting.

System action:

None

User action:

Try executing the same command once again. If you get the same response again, we are not in a position to run the test.

Response 3

Alt tester process cannot start manual test.

Not enough free test process streams

Explanation:

The system has problems in starting the test and hence the test is not starting.

System action:

None

User action:

Try executing the same command once again. If you get the same response again, we are not in a position to run the test.

Response 4

ALT tester process has acknowledged the start request

Explanation:

The system is starting the test.

System action:

None

User action:

None.

Response 5

Your request has been queued. The ALT tester is busy

Please wait.

Explanation:

The system is starting the test but can be delayed or failed to run the test.

System action:

None

User action:

Wait to see further responses.

Response 6

Testid already posted at another MAP

Explanation:

Since this testid has been posted at another MAP session, we cannot run the test on a line in this testid.

System action:

None

User action:

None

Response 7

Testid is not a MANUAL testid

Explanation:

The testid which has been posted is not a MANUAL testid and therefore we cannot run test on a single line from this testid.

System action:

None

User action:

Post the correct manual testid and attempt.

Response 8

BBT test status changes to READY or DIALLING or CONNECTED or TESTING

Explanation:

The BBT has started executing and the status of the test is continuously getting updated.

System action:

None

User action:

None

Response 9

BBT test status changes to SUSPENDED

Explanation:

The BBT has started executing and has paused at a particular condition.

System action:

None

User action:

Observe or monitor relevant points and issue CONTINUE command for proceeding with the test.

Notes**Examples**

Command name: GENREP

Command type

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

To generate a report for the requested lines (defined for a testid) in the Database either in FULL or SUMMARY format.

Warning

N/A

Command syntax

GenRep - Generate a report on the posted testid.

Parms: <Report Type>{FULL {<Option> ALL,
F[<Fault Code> STRING]},
SUMMARY {<Option> ALL,
F[<Fault Code> STRING]}}

Parameter definitions

Table 2-179GENREP Parameter Definitions

PARAMETER	VALUE	DEFINITION
Report Type	FULL	The report format for display is Full.
	SUMMARY	The report format for display is SUMMARY.
Option	ALL	To display all the lines for the testid.
	F	Display the Faulty lines for the testid.
Fault code	String	A four letter code indicating the fault. Applicable only when the Option is F.

Responses

Response 1

No Testid Posted.

Explanation:

Trying to Generate a report when no testid has been posted.

System action:

None

User action:

Either post a BBT TESTID or define an BBTSUPDB manual TESTID.

Response 2

No Valid line for this query.

Explanation:

There are no more lines in the database for the particular query.

System action:

None

User action:

None.

Response 3

Invalid Mapid.

Explanation:

The maximum number of ALT map levels (64) has exceeded.

System action:

None

User action:

Retry after sometime.

Command name: CONTINUE**Command type**

MENU command of BBTSUPDB.

Command target

SUPERNODE

Command availability

RES

Command description

To continue with the single line testing of the posted line, which has suspended due to a pause on relay operation or on scan operation.

Warning

N/A

Command syntax

Continue - Continue the suspended test.

Parameter definitions

Table 2-180CONTINUE Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response 1

Test not running on posted line

Explanation:

Trying to Continue the test when no test is running

System action:

None

User action:

Run test on a single posted line with a pause condition and issue this command only when the test is suspended.

Response 2

Test is not in suspended state

Explanation:

Trying to Continue the test when the test is not suspended

System action:

None

User action:

Issue this command only when the test is suspended.

Notes

Examples

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AR1083.ab01

Directories

Not Applicable

Table of new/modified directories

Table 2-181New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

Not Applicable

To access

Not Applicable

To return to CI

Not Applicable

Commands

Table of New/modified commands

Table 2-182New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
E800VER	CHANGED		PROGDIR
TESTSS	CHANGED		SCCPLOC

Only the output of these commands is changed.

Command name: E008VER

Command type

Not Applicable

Command target

Not Applicable

Command availability

Not Applicable

Command description

Not Applicable

Warning

Not Applicable

Command syntax

Not Applicable

Parameter definitions

Table 2-183E008VER Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Instead of displaying that the active status of the OCR feature, the status of both of the FTI flags, Overflow Call Routing on No Answer, and Overflow Call Routing on Busy will be displayed.

Response

Not Applicable

Explanation:**System action:****User action:****Notes**

Not Applicable

Examples

This example shows the output for an 800 record with one OCR components.

THE RESPONSE FROM THE DATABASE TOOK
0 MINUTES, 0 SECONDS, 12 MILLISECONDS

COMPONENT 0 INFORMATION:

THE FOLLOWING NUMBER IS THE CARRIER NUMBER

THE NUMBER IS 000

THE FOLLOWING NUMBER IS THE ROUTING NUMBER

THE NUMBER IS 6137081312

THE FOLLOWING NUMBER IS THE BILLING NUMBER

THE NUMBER IS 134

FEATURE TYPE INDICATOR PARAMETER INFORMATION:

FEATURES SUBSCRIBED ON THIS CALL:

DIALLED NUMBER IDENTIFICATION
CALLING NUMBER DELIVERY
COMMAND ROUTING
OVERFLOW CALL ROUTING ON BUSY
LOW ENTRY 800 SERVICE
CALL PROMPTER
OVERFLOW CALL ROUTING NO ANSWER
UNKNOWN FEATURE SUBSCRIBED: 8
UNKNOWN FEATURE SUBSCRIBED: 9
UNKNOWN FEATURE SUBSCRIBED: 10
UNKNOWN FEATURE SUBSCRIBED: 11

FEATURES ACTIVE ON THIS CALL:

DIALLED NUMBER IDENTIFICATION
CALLING NUMBER DELIVERY
COMMAND ROUTING
OVERFLOW CALL ROUTING ON BUSY
CALL PROMPTER
OVERFLOW CALL ROUTING NO ANSWER
UNKNOWN FEATURE SUBSCRIBED:8
UNKNOWN FEATURE SUBSCRIBED:9
UNKNOWN FEATURE SUBSCRIBED:10
UNKNOWN FEATURE SUBSCRIBED:11

FEATURES INTERPRETED BY THE SSP:

DIALLED NUMBER IDENTIFICATION
CALLING NUMBER DELIVERY
COMMAND ROUTING

OVERFLOW CALL ROUTING ON BUSY
LOW ENTRY 800 SERVICE
CALL PROMPTER
COURTESY RESPONSE
OVERFLOW CALL ROUTING NO ANSWER
OCR-NA TIMEOUT VALUE FOR COMPONENT IS: 25

Alarms

Alarm name:

Not Applicable

Conditions required to raise the alarm

Not Applicable

Duration of the alarm

Not Applicable

Command name: TESTSS

Command type

Not Applicable

Command target

Not Applicable

Command availability

Not Applicable

Command description

Not Applicable

Warning

Not Applicable

Command syntax

Not Applicable

Parameter definitions

Table 2-184TESTSS Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Instead of displaying that the active status of the OCR feature, the status of both of the FTI flags, Overflow Call Routing on No Answer, and Overflow Call Routing on Busy will be displayed.

Response

Not Applicable

Explanation:

System action:

User action:

Notes

Not Applicable

Examples

This example shows the output for an 800 record with one OCR component.

THE RESPONSE FROM THE DATABASE TOOK
0 MINUTES, 0 SECONDS, 12 MILLISECONDS

COMPONENT 0 INFORMATION:

THE FOLLOWING NUMBER IS THE CARRIER NUMBER

THE NUMBER IS 000

THE FOLLOWING NUMBER IS THE ROUTING NUMBER

THE NUMBER IS 6137081312

THE FOLLOWING NUMBER IS THE BILLING NUMBER

THE NUMBER IS 134

FEATURE TYPE INDICATOR PARAMETER INFORMATION:

FEATURES SUBSCRIBED ON THIS CALL:

DIALLED NUMBER IDENTIFICATION
CALLING NUMBER DELIVERY
COMMAND ROUTING
OVERFLOW CALL ROUTING ON BUSY
LOW ENTRY 800 SERVICE
CALL PROMPTER
OVERFLOW CALL ROUTING NO ANSWER
UNKNOWN FEATURE SUBSCRIBED: 8
UNKNOWN FEATURE SUBSCRIBED: 9
UNKNOWN FEATURE SUBSCRIBED: 10
UNKNOWN FEATURE SUBSCRIBED: 11

FEATURES ACTIVE ON THIS CALL:

DIALLED NUMBER IDENTIFICATION
CALLING NUMBER DELIVERY
COMMAND ROUTING
OVERFLOW CALL ROUTING ON BUSY
CALL PROMPTER
OVERFLOW CALL ROUTING NO ANSWER
UNKNOWN FEATURE SUBSCRIBED:8
UNKNOWN FEATURE SUBSCRIBED:9
UNKNOWN FEATURE SUBSCRIBED:10
UNKNOWN FEATURE SUBSCRIBED:11

FEATURES INTERPRETED BY THE SSP:

DIALLED NUMBER IDENTIFICATION
CALLING NUMBER DELIVERY
COMMAND ROUTING
OVERFLOW CALL ROUTING ON BUSY
LOW ENTRY 800 SERVICE
CALL PROMPTER
COURTESY RESPONSE
OVERFLOW CALL ROUTING NO ANSWER
OCR-NA TIMEOUT VALUE FOR COMPONENT IS: 25

Alarms**Alarm name:**

Not Applicable

Conditions required to raise the alarm

Not Applicable

Duration of the alarm

Not Applicable

Chapter 3 Release NA004

The information contained in this document has to do with changes, additions, or deleted information in reference to man-machine interface (MM) or commands. This chapter, NA004, includes information appropriate for the following product computing module loads (PCLs): LECB004, LETB004, CDNB004, LTTB004, LATB004, USTOPS004, and CDNTOPS004.

AD6564mm.aa09

Directories

Table of new/modified directories

Table 3-1 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
ACDSHOW_DIR	Changed		SUPER-NODE, BRISC	RES

Accessing directory: ACDSHOW_DIR

To access

At the CI prompt, type the command ACDSHOW.

To return to CI

Typing “QUIT” at the ACDSHOW prompt returns the user to the previous command level. For example, if ACDSHOW was entered from within the DMS Table Editor, quitting from the ACDSHOW command level returns the user to the Table Editor.

If the user wishes to exit the ACDSHOW command and return to the CI level of the MAP, “ALL” must be provided as a parameter to the “QUIT” subcommand, as “QUIT ALL.”

Commands

Note: This feature does not create any user-visible changes to the MM. It provides data structures and hooks for feature AD6900 in the MSL0 layer. Feature AD6900 does make visible changes to the MM. For details, see the MM section of that feature.

Table of New/modified commands

Table 3-2 New/Modified Command

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
None			

Command name:

Command type

Command target

Command availability

Command description

Warning

Command syntax

Parameter definitions

Table 3-3 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Explanation:

System action:

User action:

Notes

Examples

Alarms

NONE

AD6822mm.aa07**Directories****Table of new/modified directories****Table 3-4 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
DRM	CHANGED	N/A	Supernode	RES

Accessing directory:

DRM

To access

>MAPCI;MTC;APPL;OAMAP;DRM

To return to CI

>QUIT ALL

Commands**Table of New/modified commands****Table 3-5 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
INFO	CHANGED	N/A	DRM

Command name: INFO**Command type**

MENU

Command target

SuperNode

Command availability

RES

Command description

All command remain the same as described for feature AD4332.

Warning

N/A

Command syntax

All command syntax remain the same as described for feature AD4332

Parameter definitions

No parameter definitions.

Responses

Response

OCC Schedule; ->FP0 (ACTN): 94/09/15 19:30:44

Press <CR> to continue, or enter QUIT:

AUDIT TYPE	AUDIT BEGIN / END	HISTORY BEGIN / END	INTERVAL

SPACE	19:29:03 / 19:29:03	19:39:03 / 19:39:03	00:10:00
VOLUME	19:28:42 / 19:29:03	19:59:03 / 19:59:58	00:30:00
APPLICATION	18:54:41 / 18:54:41	19:54:41 / 19:54:41	01:00:00
DRMFDIR	16:26:21 / 16:36:32	03:00:00 / 03:10:00	10:23:28

Next Scheduled ROTATE: 94/09/16 03:00:00

Explanation:

This is an example of the response when the following has been entered:

> INFO OCC SCHED

The response will present “AUDIT TYPE”, “ADUIT HISTORY”, “INTERVAL” information only. The “NEXT BEGIN” Field will be removed by this feature. The “AUDIT HISTORY” will display last and previous audit begin and end times. The “INTERVAL” will display the difference between BEGIN of last audit and END of previous audit. During the audit, the last end will be displayed as 00:00:00. If the time changed by manually, the INTERVAL will display real relative time. During calculating the interval, the interval will be displayed as 00:00:00.

System action:

No system action is required

The INFO <applid> SCHED command only shows the audit and rotate schedule. No system action is required.

User action:

No user action is required.

The INFO <applid> SCHED command can be used to display this information without performing the audits.

Notes

N/A

Examples

INFO OCC SCHED

INFO AMA SCHED FP0

Alarms

Alarm name:

No new alarms are created by this feature.

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AD7447mm.aa05**Directories****Table of new/modified directories****Table 3-6 N/A New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

N/A

To access**To return to CI****Commands****Table of New/modified commands****Table 3-7 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name: PMIST**Command type**

Non-Menu

Command target

Supernode and BRISC

Command availability

RES - in-house tool

Command description

PMIST is a tool used to display the contents of an IAM message. PMIST is enhanced to display the new Trunk Member Range Generic Digits parameter and its associated data. PMIST is also enhanced to display the data associated with the existing TRKGRP-SWID generic digits parameter. Note, PMIST is also used by CALLTRAK to display message traces.

Warning

None.

Command syntax

The PMIST command is not changed. However, to display the new data in a message trace, the PMIST command is to be used as follows from a CI MAP:

3. enter "listsf all"
4. enter "read PUP"
5. enter "convert trk" <CLLI> <trk member>
6. EXTERNAL TRUNK NAME:
7. enter <trk member>
8. enter "include"
9. enter "cl" to clear the message list
10. make your DINA Class I TANDMRTE call which will generate an IAM message.
11. enter "d" to display the message trace.

Parameter definitions

Feature AD7447 does not modify nor add parameters to the command.

Table 3-8 PMIST Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Upon running the PMIST command as described in section Command Syntax the results are as shown in the section titled EXAMPLES.

For Generic Digits Parameter TERM SWID AND TRUNK:

GENERIC DIGITS MSG TYPE : “GENERIC DIGITS TERM SWID AND TRUNK”

ENCODING SCHEME : “ BINARY”

GENERIC DIGITS (IA5/BINARY) : INT

TERM SWITCHID : {0 to 127}

TERM TRKGRP : {0 to 8191}

For Generic Digits Parameter MEMBER RANGE INFO :

GENERIC DIGITS MSG TYPE : “GENERIC DIGITS MEMBER RANGE
INFO ENCODING SCHEME : “BINARY”

GENERIC DIGITS (IA5/BINARY) : INT

STARTING MEMBER : {0 to 9999}

ENDING MEMBER : {0 to 9999}

Explanation:

The display shows the contents of the message that can be used for testing and debugging.

System action:

No action required.

User action:

No action required.

Notes

Prior to this feature, PMIST could display the generic digits message type called GENERIC DIGITS TERM SWID AND TRUNK but not its terminating switch ID and trunk group data. With this feature, PMIST can display this data.

With this feature, PMIST can display the new generic digits message type called GENERIC DIGITS MEMBER RANGE INFO and the trunk member range information associated with it.

Examples

1. Display for generic digits message type GENERIC DIGITS TERM SWID AND TRUNK:

For an incoming IAM message such as:

INCOMING 08:15:25.02 NODE TYPE= LTC_NODE

CCS7_IAM_MSG

NN= 002A TN= 01E2 MSGTAG= 00 ROUTE= 0080 ERROR= 00
LENGTH= 30

AGENT= CKT IMT740C7DR04 0

2C 01 01 00 20 01 0A 03 05 0C 02 80 90 07 03 10 12 85 13 22 22 0A 07
03 10 12

64 11 22 11 C1 06 69 34 DF 00 34 00 00 00

Prior to this feature:

The Optional Part of the IAM message would contain the following:

OPTIONAL PART:

 GENERIC_DIGITS (#C1) :
 GENERIC DIGITS MSG TYPE : GENERIC DIGITS
TERM SWID AND TRUNK
 ENCODING SCHEME : BINARY

 GENERIC DIGITS (IA5/BINARY) : 13312

With this feature:

The Optional Part of the IAM message would contain the following:

OPTIONAL PART:

 GENERIC_DIGITS (#C1) :
 GENERIC DIGITS MSG TYPE : GENERIC DIGITS
TERM SWID AND TRUNK
 ENCODING SCHEME : BINARY
 GENERIC DIGITS (IA5/BINARY) : 13312
 TERM SWITCHID : 52
 TERM TRKGRP : 223

2. Display for generic digits message type GENERIC DIGITS MEMBER RANGE INFO :

For an incoming IAM message such as:

INCOMING 08:28:43.42 NODE TYPE= LTC_NODE
CCS7_IAM_MSG
NN= 002A TN= 01E2 MSGTAG= 00 ROUTE= 0080 ERROR= 00
LENGTH= 32
AGENT= CKT IMT740C7DR04 0

2C 01 01 00 20 01 0A 03 05 0C 02 80 90 07 03 10 12 85 13 22 22 0A 07
03 10 12
64 11 22 11 C1 08 65 00 0A 00 0F 00 34 00 00 00

With this feature:

The Optional Part of the IAM message would contain the following:

OPTIONAL PART:

GENERIC_DIGITS (#C1) :
GENERIC DIGITS MSG TYPE : GENERIC DIGITS
MEMBER RANGE INFO
ENCODING SCHEME : BINARY
GENERIC DIGITS (IA5/BINARY) : 13312
STARTING MEMBER : 10
ENDING MEMBER : 15

Alarms

Alarm name:

Not Applicable

Conditions required to raise the alarm

Duration of the alarm

AE1686mm.aa03**Directories**

See AE1545

Table of new/modified directories**Table 3-9 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands**Table of New/modified commands****Table 3-10 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:

Command type

Command target

Command availability

Command description

Warning

Command syntax

Parameter definitions

Table 3-11 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response

Explanation:

System action:

User action:

Notes

Examples

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AF5004mm.aa33**Directories****Table of new/modified directories****Table 3-12 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
XPMLFPDIR	NEW	N/A	ALL	RES

Accessing directory:**To access**

Type XPMLFP

To return to CI

Type Quit

Commands**Table of New/modified commands****Table 3-13 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
PMLOADER QUERY	CHANGED	Renamed FILE option to LOAD	N/A
PMLOADER AUDIT	CHANGED	Renamed FILE option to LOAD	N/A
LOADPM	CHANGED	N/A	N/A
XPLIST	NEW	N/A	PATCHER
START	NEW	N/A	XPMLFP
STATUS	NEW	N/A	XPMLFP
ABORT	NEW	N/A	XPMLFP
PATCHLIST	NEW	N/A	XPMLFP

Command name: PMLOADER QUERY**Command type**

NON-MENU.

Command target

BOTH.

Command availability

RES.

Command description

This feature changes the PMLOADER QUERY command's output. It added both active and backup file information. Renames the FILE option to LOAD. Since the input parameter is a load name, it is clear to rename the option to LOAD.

Warning

Same as before.

Command syntax

Same as before.

Parameter definitions

Same as before.

Responses

Same as before.

Response

Same as before.

Explanation:

The following are the headings for PMLOADER QUERY with options ALL and LOAD:

- **Index:**
The index of the entry (or file entry in table PMLOADS). This number is used by table controls which use the old interface.
- **Load:**
The name of the file entry.
- **ID:**
A random number from 0 to 65535 used to uniquely identify the entry (or file entry).
- **BCS:**
The BCS of the SOS load, written as a 2-digit number and 2 letters.
- **Product:**
An integer used by SOS to indicate the type of product that SOS will be loaded on. Some typical examples are: CM, MS, ENET, etc.
- **Active:**
Filename:
 - Active file name. Same value as the ACTFILE field in Table PMLOADS.Directory Name:
 - The name of the directory (or device) where the active file is stored.Scannable:
 - A boolean value indicates the scannability of the directory.Verified:
 - A boolean value indicates that the active file has been read and verified to be valid by Table PMLOADS.FID:
 - A unique ID assigned by the file system, containing a volume ID and a file ID for the active file.Alarm:
 - The alarm associated with the active file entry.
- **Backup:**
Filename:
 - Backup file name. Same value as the BKPFILE field in Table PMLOADS.Directory Name:
 - The name of the directory (or device) where the backup file is stored.Scannable:

-
- A boolean value indicates the scannability of the directory.

Verified:

- A boolean value indicates that the backup file has been read and verified to be valid by Table PMLOADS.

FID:

- An unique ID assigned by the file system, containing a volume ID and a file ID for the backup file.

Alarm:

- The alarm associated with the backup file entry.

The following is the heading for PMLOADER QUERY with option

Alarm:

- Load:

The name of the file entry. Same value as the LOADNAME in Table PMLOADS.

- Filename:

The file name of either the active or backup file name that caused the alarm. Either value of the ACTFILE or BKPFIL in Table PMLOADS. If the ACTFILE and BKPFIL are the same file then, it will only output one alarm message.

- Reason:

The alarm reason associated with the file entry.

System action:

User action:

Notes

None.

Examples

Example: Previous PMLOADER QUERY ALL

Index	File Name	Directory Name
ID	FID	Scanable Verified Product BCS Alarm
24	DC735BL	UNKNOWN
25	0FFF FFFF FFFF FFFF	Y N 0 0AA Unscanable directory
47	ENX35BJ	S01DENET
48	0202 8442 0001 0013	Y Y 3 35BJ No alarm
48	MPF35BJ	S01DENET
49	0202 8442 0003 0014	Y Y *** *** Verification failed
49	SMA35BJ	S01DXPM
50	0202 8444 0008 0013	Y Y 0 0AA No alarm

Example: New PMLOADER QUERY ALL

Index	Load	ID	BCS	Product
Active	Filename	Directory Name	Scanable	Verified
FID	FID	Alarms		
Backup	Filename	Directory Name	Scanable	Verified
FID	FID	Alarms		
1	NRC33CB	51	0AA	0
	NRC33CB	T0		N
	0FFF FFFF FFFF FFFF		Unscannable directory	
	NRC33CB	T0		N
	0FFF FFFF FFFF FFFF		Unscannable directory	
8	MPCX33AB	38	0AA	0
	MPCX33AB_921218	S01DPMLOAD	Y	Y
	8346 5412 1234 8767	No alarm		
	MPCX33AB	S00DPMLOAD	Y	Y
	0202 8402 0001 0020	No alarm		
22	NLT36AX	31	0AA	0
	NLT36AX_921209	S01DXPM	Y	Y
	0892 5700 9823 932A	No alarm		
	NLT36AX	S00DXPM	Y	Y
	0202 8400 002C 001A	No alarm		
23	NDT36AX	32	0AA	0
	NDT36AX_921210	S00DXPM	Y	Y
	A984 7777 4610 8810	No alarm		
	NDT36AX	S00DXPM	Y	Y
	0202 8400 0021 0018	No alarm		

Figure 3-64 Examples of the PMLOADER QUERY ALL command

Example: Previous PMLOADER QUERY FILE

Index	File Name	Directory Name
ID	FID	Scanable Verified Product BCS Alarm
8	NLG33BG	S00DXPM
9	0FFF FFFF FFFF FFFF N	N 0 0AA Unscanable directory

Example: New PMLOADER QUERY LOAD

Index	Load	ID	BCS	Product
Active	Filename	Directory	Name	Scannable Verified
FID				Alarms
Backup	Filename	Directory	Name	Scannable Verified
FID				Alarms
24	ESA36AX	55	0AA	0
	ESA36AX	S01DXPM		Y Y
	8467 9932 5109 D492	No alarm		
	ESA36AX	S00DXPM		Y Y
	0202 8400 001C 0016	No alarm		

Figure 3-65 Examples of the PMLOADER QUERY LOAD/FILE command

Example: Previous PMLOADER QUERY ALARM

```
>pmloader query alarm
A MINOR alarm is being raised by table PMLOADS for the following reasons:
  NLG33BG          Unscannable directory
  SMA33BG          Unscannable directory
  MPF35BJ          Verification failed
```

Example: New PMLOADER QUERY ALARM

```
>pmloader query alarm
A MINOR alarm is being raised by table PMLOADS

LOAD
Filename                                Reason
-----
NRC33CB
NRC33CB                                Unscannable directory

NLG33BG
NLG33BG_920616                        Unscannable directory

XLCM34D
XLCM34D                                File not found

SMA33BG
SMA33BG_920929                        Invalid directory
```

Command name: PMLOADER AUDIT

Command type

NON-MENU.

Command target

BOTH.

Command availability

RES.

Command description

This feature changes the system action of PMLOADER AUDIT command. It audits both active and backup files. Renames FILE option to LOAD. Since the input parameter is a load name, it is clear to rename the option to LOAD.

Warning

Same as before.

Command syntax

Same as before.

Parameter definitions

Same as before.

Responses

Same as before.

Response

Same as before.

Explanation:**System action:**

This command did not change the output display. It audits both the active and backup files when this command is invoked.

User action:

Same as before.

Notes

None.

Examples

The PMLOADER AUDIT <option> (options are ALL and LOAD) is modified to consider both the active loadfile and backup loadfile. No change is made for the output message.

Example: PMLOADER AUDIT ALL
<pre>>pmloader audit all Audit request submitted.</pre>
Example: PMLOADER AUDIT LOAD
<pre>>pmloader audit load xlc34d Audit request submitted.</pre>

Command name: LOADPM

Command type

NON-MENU.

Command target

BOTH.

Command availability

RES.

Command description

Added option 'BACKUP'. By specifying the BACKUP option, it will load the backup file instead of the active file specified in Table PMLOADS. This option is to help the craftperson specify the backup file instead of remembering the full backup file name. This is only valid on LTC type XPMs (i.e. LGC, LTC...).

Warning

Same as before.

Command syntax

```
LOADPM: Load the whole PM, or a unit
        ALL parameter will execute LOADPM on
        all PMs in the post set of the same PM
        type as the PM displayed on the MAP
Parms: <DEVICE> {UNIT <UNIT_NO> {0 TO 1},
                PM,
                INACTIVE}
        [<SOURCE> {CC [<MODE> {FULL,
                                DATA,
                                EXEC,
                                CMR,
                                FIRMWARE}}]
                                [<FILE> STRING}}]
        [<FORCE> {FORCE}]
        [<NOWAIT> {NOWAIT}]
        [<ALL> {ALL <RFILE> STRING}]
```

Parameter definitions

None.

Table 3-14 LOADPM Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response

If user tries to load a per-segment file format XPM loadfile through an earlier CM which does not support that format, the CM returns:

Loadpm Failed

Invalid First Char.

Explanation:

The code which handles the new format is required, most likely from a patch.

System action:

User action:

Notes

Examples

Example: Previous LOADPM CI command:

```
LOADPM: Load the whole PM, or a unit
        ALL parameter will execute LOADPM on
        all PMs in the post set of the same PM
        type as the PM displayed on the MAP
Parms: <DEVICE> {UNIT <UNIT_NO> {0 TO 1},
                PM,
                INACTIVE}
        [<SOURCE> {CC [<MODE> {FULL,
                                DATA,
                                EXEC,
                                CMR,
                                FIRMWARE}}
                                [<FILE> STRING]]}
        [<FORCE> {FORCE}]
        [<NOWAIT> {NOWAIT}]
        [<ALL> {ALL <RFILE> STRING}]

>LOADPM PM
>LOADPM PM CC FULL
>LOADPM PM CC FULL FORCE NOWAIT
```

Example: LOADPM CI command for LTC type XPMs:

```
LOADPM: Load the whole PM, or a unit
        ALL parameter will execute LOADPM on
        all PMs in the post set of the same PM
        type as the PM displayed on the MAP
Parms: <DEVICE> {UNIT <UNIT_NO> {0 TO 1},
                PM,
                INACTIVE}
        [<SOURCE> {CC [<MODE> {FULL,
                                DATA,
                                EXEC,
                                CMR,
                                FIRMWARE}}
                                [<FILE> STRING]]}
        [<FORCE> {FORCE}]
        [<NOWAIT> {NOWAIT}]
        [<ALL> {ALL <RFILE> STRING}]

>LOADPM PM CC FULL BACKUP
>LOADPM PM CC FULL BACKUP FORCE
>LOADPM PM CC FULL BACKUP FORCE NOWAIT
>LOADPM PM CC FULL BACKUP ALL BACKUP
>LOADPM PM CC FULL BACKUP FORCE ALL BACKUP
```

Command name: XPLIST**Command type**

NON-MENU

Command target

BOTH NT40 and Supernode.

Command availability

RES.

Command description

The XPLIST PATCHER command allows a user to determine for a particular XPM unit, which patches have been applied as a result of loading a patched loadfile, and which patches have been applied using the patch process.

Warning

Not applicable.

Command syntax**Figure 3-66 XPLIST Command syntax**

XPLIST- Display XPM patch list with loadfile patch information.
Parms: [<options>... <pmtyp> STRING
 <devno> {0 to 9999}
 <unitno>]

Parameter definitions**Table 3-15 XPLIST Parameter definitions**

PARAMETER	VALUE	DEFINITION
pmtyp	string	string value of pmtyp (e.g. LTC)
devno	0 to 9999	device number
unitno	0 to 1	unit number

Responses

Response

An example of a typical response to the XPLIST command is:

PATCHES	LOADFILE PATCHED
-----	-----
XRD09X36	YES
XDD39X36	YES
XX45X36	YES
XDV22X36	NO

Explanation:

The example response above indicates that the first three patches were loadfile patched, and the last patch, XDV22X36 was not (it was patched using the PATCHER apply command). The response is visible on both NT40 and Supernode.

System action:

No system action results from the execution of this command.

User action:

No user action is required as a result of executing the XPLIST command. The loadfile patch status displayed in the output is for information only.

Notes

The XPLIST command is valid for XPM nodes only. The XPM node must be loaded and able to communicate with the CM in order for the loadfile patching information to be obtained.

Examples

Example: XPLIST CI command:

```

>patcher
PATCHER:
>q xplist
XPLIST - Display XPM patch list with loadfile patch information.
Parms: [<options>... <pmtype> STRING
        <devno> {0 to 9999}
        <unitno>]
>xplist ltc 0 0
PATCHES      LOADFILE PATCHED
-----
DXC99X37      YES
AUB33X36      YES
>

```

Command name: START**Command type**

NON-MENU

Command target

NT40 and Supernode.

Command availability

RES.

Command description

The XPMLFP START command initiates XPM Loadfile Patching on the active loadfile associated with the shipped loadname in table PMLOADS.

Warning

XPM Loadfile Patching only runs on XPM loads that have the updata field set to Y. Start does not allow patching of patches that have not met the soak criteria.

If XPMLFP needs to remove a patch from the active loadfile, it must use the backup loadfile. If the backup loadfile cannot be found (has been erased, is not where the datafill says it is) then loadfile patching on that load is aborted, and a PCH350 log is generated.

Command syntax

Figure 3-67 XPMLFP START Command syntax

START - Initiate XPM Loadfile Patching. Parms: [<Loadname or ALL> STRING]

Parameter definitions

Table 3-16 START Parameter definitions

PARAMETER	VALUE	DEFINITION
Loadname	string	string value of loadname (e.g. NLT02BQ)
ALL	string	string value of 'ALL'

Responses

Response

Response to Start no matter what parameter is used:
XPM loadfile patching started.

Explanation:

The task runs in the background whether it is invoked by the system at the scheduled time or by a user from a MAP.

System action:

The XPMLFP task searches through table PMLOADS. It will incorporate the patches for any loads with patches that meet the loadfile patching criteria.

User action:

No user action is required. User can check for PCH350 and PCH650 logs for results at a later time.

Notes

None.

Examples

Response to Start ALL when no patches have met the criteria:

XPM loadfile patching started.

Response to Start ALL when one or more loads has patches that have met the criteria:

XPM loadfile patching started.

For start NLT36BL when no patches have met the criteria:

XPM loadfile patching started.

For start NLT36BL when one or more patch has met the criteria:

XPM loadfile patching started.

Command name: ABORT

Command type

NON-MENU

Command target

NT40 and Supernode.

Command availability

RES.

Command description

The XPMLFP ABORT command aborts the loadfile patching that is in progress, and prevents loadfile patching of any of the loads which have not been loadfile patched up to that point. XPM Loadfile Patching runs through all loads again at the next scheduled time.

Warning

To stop loadfile patching from running, set the UPDACT field in table PMLOADS to N for each XPM loadname.

Command syntax

Figure 3-68 XPMLFP ABORT Command syntax

ABORT - Stops XPM Loadfile Patching if it is in progress.
Parms: [] (None)

Parameter definitions

Table 3-17 ABORT Parameter definitions

PARAMETER	VALUE	DEFINITION

No Parameters

Responses

Response

Response to Abort no matter what parameter is used:

This operation will abort the XPM loadfile patching
operation if it is in progress. Continue ?

Please confirm ("YES", "Y", "NO", "N");

Explanation:

The task runs in the background whether it is invoked by the system at the scheduled time or by a user from a MAP. If it is running, this command stops it.

System action:

The XPMLFP task is stopped and appropriate cleanup (closing files, erasing unfinished files) is completed.

User action:

No user action is required.

Notes

None.

Examples

Response to Abort whether tasks is running or not:

This operation will abort the XPM loadfile patching
operation if it is in progress. Continue ?

Please confirm ("YES", "Y", "NO", "N"):

Command name: STATUS

Command type

NON-MENU

Command target

NT40 and Supernode.

Command availability

RES.

Command description

The XPMLFP STATUS command displays when XPM Loadfile Patching is scheduled to run and which patches can be inserted into each XPM load that is datafilled in table PMLOADS.

Warning

Only patches that meet the criteria (soak days, correct patch format, prerequisites are present) can be inserted.

The Status command will 'complain' about files that it cannot find, and about files that have the updact field of table PMLOADS datafilled with 'Y' when the file is not a BCS36 (BCS02) XPM file. See examples for details.

Command syntax

Figure 3-69 XPMLFP STATUS Command syntax

STATUS - Display information about XPM Loadfile Patching. Parms: [<Loadname or ALL> STRING]

Parameter definitions

Table 3-18 STATUS Parameter definitions

PARAMETER	VALUE	DEFINITION
Loadname	string	string value of loadname (e.g. NLT02BQ)
ALL	string	string value of 'ALL'

Responses

Response

Response to Status command:

Status NLT02BQ

XPM loadfile patching is scheduled for tomorrow at 03:15.

Patches for load: NLT02BQ

No patches applicable to load NLT02BQ

Status All

XPM loadfile patching is scheduled for tomorrow at 03:15.

No patches applicable to load NLT02BQ

No patches applicable to load NDT02BQ

No patches applicable to load CRI02BQ

File system open failed on file: DCH36BQ Reason: File does not exist.
Check that fields ACTFILE and ACTVOL for load DCH36BQ is valid in table PMLOADS.

Load CMR33AI5 is not an XPM loadfile patchable load.
However, field UPDACT in table PMLOADS is Y.

Explanation:

Tells the user when XPM loadfile patching is scheduled and which loads have patches that are applicable.

System action:

The XPMLFP task searches through table PMLOADS and looks up all the active loadfiles to find whether patches have met the soak period.

User action:

No user action is required.

Notes

None.

Examples

Response to Status ALL when no patches have met the criteria and all loads in table PMLOADS are associated with loads on the switch:

No patches applicable to load NLT02BQ.

No patches applicable to load NDT02BQ.

No patches applicable to load CRI02BQ.

If a load in table PMLOADS is not on disk (accessible to XPMLFP), the response is:

File system open failed on file: DCH36BQ Reason: File does not exist.
Check that fields ACTFILE and ACTVOL for load DCH36BQ is valid in table PMLOADS.

If a load in table PMLOADS has the UPDACT field set to 'Y' when the file cannot be loadfile patched, the response is:

Load CMR33AI5 is not an XPM loadfile patchable load.
However, field UPDACT in table PMLOADS is Y.

Response to Status NLT02BQ when a patch has met the criteria:

XPM loadfile patching is scheduled for tomorrow
at 03:15.

Patches for load: NLT02BQ
Apply XTC00X02.

Command name: PATCHLIST**Command type**

NON-MENU

Command target

NT40 and Supernode.

Command availability

RES.

Command description

The XPMLFP PATCHLIST command displays the list of patches already applied to the active loadfile.

Warning

None.

Command syntax

Figure 3-70 XPMLFP START Command syntax

Parms: [<Loadname or ALL> STRING]

Parameter definitions

Table 3-19 PATCHLIST Parameter definitions

PARAMETER	VALUE	DEFINITION
Loadname	string	string value of loadname (e.g. NLT02BQ)
ALL	string	string value of 'ALL'

Response

Response to Patchlist NLT02BQ:

Patches applied to loadname: NLT02BQ filename: NLT02BQ_930501
XTC00X02 XTC01X02.

Explanation:

The command displays the list of patches that are in the active loadfile associated with the given loadname.

System action:

The command gets the active loadfile from table PMLOADS and displays the list of patches that were 'applied' to that file.

User action:

No user action is required.

Notes

None.

Examples

Response to Patchlist NLT02BQ, a loadname who's active file has 2 patches:

Patches applied to loadname: NLT02BQ filename: NLT02BQ_930501
XTC00X02 XTC01X02.

Response to Patchlist NDT37BS, which is not datafilled:

Not a valid loadname in table PMLOADS: <Loadname or ALL> STRING

Response to Patchlist NLT02BQ_930501, the active loadfile corresponding to loadname NLT02BQ:

Not a valid loadname in table PMLOADS: <Loadname or ALL> STRING

Command name: PMDEBUG Command - P(atch status)

The command to display the patch status in the XPM unit is being enhanced to display if patch was inserted with XPM Loadfile Patching.

Command type

MENU

Command target

All XPM and XPM Plus peripherals.

Command availability**Command description**

The patch status that is accessible through the MP/UP/EP top level by typing P for Patcher output is being enhanced to differentiate patches that were applied via XPM Loadfile Patching from patches that were applied to the XPM.

Warning

Not applicable.

Command syntax**Figure 3-71 Patch Status Command syntax**

P or p- Display patches in all processors of this unit of the XPM.

(no parameters)

Includes patches in MP, SP, FP, ISP, EP, UP.

Parameter definitions

There are no parameters associated with this command.

Response

PATCH_ID	STATUS

XKD28X36	APPLIED (Loadfile Patching)

XGG27X36	APPLIED

Free Map

	Address	Length	Reclaimed	Processor
Index: [0]	1AD2D0	29872 (74B0)	Yes	ALL
Index: [1]	0DBF2E	36 (0024)	Yes	ALL
Index: [2]	0D86F0	132 (0084)	Yes	ALL

Total store available: 007558 Bytes.

Total store not reclaimed: 000000 Bytes.

Explanation:

The example response above indicates that the first patch was loadfile patched, and the second patch, XGG27X36 was not (it was patched using the PATCHER apply command). The free map entries correspond to the patch that was applied using the PATCHER apply command. The patch that was inserted in the loadfile does not use free map entries.

System action:

No system action results from the execution of this command.

User action:

The loadfile patch status displayed in the output is for information only. No user action is required.

Notes

Access to PMDEBUG requires a password at the CM.

Examples

The following shows the TOP level of the MP in an LTC (a domestic XPM using 6x45 vs. MX77 cards):

Tlme,TAsk,Load,Xprompt,DAtadump,Debug,Swerr,Ipc,Queues,Uspace,Patches,UTlmon,Msgtr,Chnls,Opf,MTc,Trmtrc,XPMtrak,Gdt,Diagnose,Audit,MA tediag,CAudit,CP,SE,Rcvrmon,MGen,OMUnsolv,CNd,DDsys,TKdata,PRfm, Bigfoot,PARaudt

LTCMP> p

PATCH_ID	STATUS
-----	-----
XKD28X36	APPLIED (Loadfile Patching)
Free Map	

	Address Length Reclaimed Processor
Index: [0]	1AD2E2 29854 (749E) Yes ALL
Total store available: 00749E Bytes.	
Total store not reclaimed: 000000 Bytes.	

Note: Note: Loadfile patching does not use space that was allocated for patching in the XPM.

The loadfile patch status displayed in the output is for information only.

Alarm name:

PMLOAD

Conditions required to raise the alarm

Backup loadfile is not found in the indicated BKPVOL location.

Duration of the alarm

When the backup loadfile is restore to the indicated BKPVOL location.

AF5898mm.aa07

Directories

LCMDIR

Table of new/modified directories

Table 3-20 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LCMDIR	CHANGED	- N/A -	SUPERNODE	RES
PROGDIR	CHANGED	- N/A -	SUPERNODE	RES

Accessing directory: LCMDIR

To access

At the CI prompt type in 'MAPCI;MTC;PM;POST LCM <site> <frame> <unit>' to access the LCMDIR directory.

The PROGDIR directory can be accessed at the CI prompt.

To return to CI

At the POST prompt on the MAP type in 'QUIT ALL' to quit all directories and return to the CI prompt.

Commands

The **TST**, **REXTEST** and **QUERYPM** commands are affected by the feature.

Table of New/modified commands

Table 3-21 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TST	CHANGED	N/A	LCMDIR
REXTEST	CHANGED	N/A	PROGDIR
QUERYPM	CHANGED	N/A	LCMDIR

Table 3-21 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
NAG	CHANGED	N/A	PROGDIR

Command name: TST**Command type**

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The TST command is used to perform tests on the posted LCM. Existing options to the TST command are UNIT, PM, LINK, DRWR and REX. The first four options allow testing of the specified device on the LCM. The REX option in the TST command has four sub-options which are ON, OFF, QUERY and NOW. The ON and OFF options enable and disable LCM REX respectively on the posted LCM. The QUERY option provides information on the last run LCM REX result and the LCM REX status of the posted LCM. The NOW option actually starts a LCM REX test on the posted LCM.

The new option to the TST command is COVREX (Continuity and Voltage tests). The TST COVREX command allows the craftsperson to manually perform the LCMCOV REX test on the posted LCM. The TST COVREX command provides access to four options which are ON, OFF, QUERY and NOW. The ON and OFF options enable and disable LCMCOV REX respectively on the posted LCM. The QUERY option provides information on the last run LCMCOV REX result and the LCMCOV REX status of the posted LCM.

Warning

The following warning message will be displayed when the TST COVREX NOW command is entered at the MAP.

LCM HOST 00 0 will be put into takeover mode during the COV REX.

Do you want to continue with the COV REX test?

Please confirm (“YES”, “Y”, “NO”, or “N”):

The craftsperson can cancel or proceed with the test at this point.

Command syntax

The command syntax is as follows

```
TST <Device> {UNIT  <Unit_no> {0 TO 1}
                [<All> {ALL}],
    PM          [<All> {ALL}],
    LINK        <Pside_link> {0 TO 3},
    DRWR        <Drwr_no> {0 TO 23}
                [<Relay> {RELAY}],
    REX         <Rex_action> {  ON,
                                QUERY,
                                OFF,
                                NOW [<Nowait> {NOWAIT}]}}
    COVREX <Covrex_action>{      ON,
                                QUERY,
                                OFF,
                                NOW [<Nowait> {NOWAIT}]}}
```

Parameter definitions

Table 3-22 TST Parameter Definitions

PARAMETER	VALUE	DEFINITION
Device	COVREX	Manual LCMCOV REX execution. Allows access to COVREX_ACTION options.
Covrex_action	ON	Enables LCMCOV REX on the posted LCM
Covrex_action	OFF	Disables LCMCOV REX on the posted LCM
Covrex_action	QUERY	Displays information on the LCMCOV REX status and result for the posted LCM
Covrex_action	NOW	Begins the LCMCOV REX on the posted LCM.
Nowait	NOWAIT	Returns a prompt immediately. (optional)

Responses

All responses and commands are valid for the SUPERNODE.

Response 1

<LCM node> <site> <frame> <unit> is added to the list of LCMs scheduled for a COV REX test.

Explanation:

This response is generated when the command **TST COVREX ON** is entered to change the LCMCOV REX status from disabled to enabled.

System action:

The system enables LCMCOV REX on the posted LCM.

User action:

None.

Response 2

<LCM node> <site> <frame> <unit> is already in the list of LCMs

scheduled for a COV REX test.

Explanation:

This response is generated when the command **TST COVREX ON** is entered in an attempt to enable LCMCOV REX on a LCM which already has the LCMCOV REX test enabled.

System action:

None

User action:

None.

Response 3

<LCM node> <site> <frame> <unit> is excluded from the list of LCMs scheduled for a COV REX test.

Explanation:

This response is generated when the command **TST COVREX OFF** is entered to disable the LCMCOV REX on the posted LCM

System action:

The system disables LCMCOV REX on the posted LCM.

User action:

None.

Response 4

<LCM node> <site> <frame> <unit> is included in the list of LCMs scheduled for a COV REX test.

Recent COV REX Results:

COV REX on <LCM node> <site> <frame> <unit> has not been performed.

Explanation:

This response is generated to the **TST COVREX QUERY** command. The second half of the response displays the recent REX results. In this case, COV REX has not been performed on the LCM. Note that the first sentence in the response could indicate “*included in*” or “*excluded from*” depending on whether COV REX has been enabled or disabled on the posted LCM.

System action:

The system displays the COV REX status and information.

User action:

None.

Response 5

<LCM node> <site> <frame> <unit> is <status> the list of LCM types
scheduled for a COV REX test.

Recent COV REX Results:

Last COV REX test was <day> <date> at <time>; <result>.

Explanation:

This response is generated to the **TST COVREX QUERY** command. The second half of the response displays the recent REX results. The result field can be PASSED or FAILED. The status field could indicate “*included in*” or “*excluded from*” depending on whether COV REX has been enabled or disabled on the posted LCM.

System action:

The system displays the COV REX status and information.

User action:

None.

Response 6

<LCM node> <site> <frame> <unit> is included in the list of LCMs

scheduled for a COV REX test.

Recent COV REX Results:

Last COV REX test was <day> <date> at <time>; <result>.

UNIT 0:

<result_text>

UNIT 1:

<result_text>

Explanation:

This response is generated to the **TST COVREX QUERY** command. The second half of the response displays the recent REX results. The result field can be PASSED or FAILED. When result is FAILED the individual results of each unit are listed. The result_text field can be “No failure reported” if the unit passes the test. If a unit fails the COV REX test the result_text field will list the reason for failure and possibly a card list. The status field could indicate “*included in*” or “*excluded from*” depending on whether COV REX has been enabled or disabled on the posted LCM.

System action:

The system displays the COV REX status and information.

User action:

None.

Response 7

Request Denied: MTCE already in progress

Explanation:

This message is displayed in response to the **TST COVREX NOW** command when the posted LCM is already under test.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try again after maintenance has been completed on the LCM.

Response 8

Request Denied: REX test in progress

Explanation:

This message is displayed in response to the **TST COVREX NOW** or the **TST REX NOW** command when the posted LCM is already executing a REX test.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try again after REX has been completed on the LCM.

Response 9

Request Denied: SREX Failed to reserve node for REX

Explanation:

This message is displayed in response to the **TST COVREX NOW** or the **TST REX NOW** command when the posted LCM is not available for testing due to conditions like overload.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try again at a later time.

Response 10

Request Denied: REX test in progress

Explanation:

This message is displayed in response to the **TST COVREX NOW** or the **TST REX NOW** command when the posted LCM is already executing a REX test.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try again after REX has been completed on the LCM.

Response 11

Request Denied: Another LCMCOV_REX_TEST is in progress

Explanation:

This message is displayed in response to the **TST COVREX NOW** command when some other LCM is also performing the COV REX test.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try again after LCMCOV REX test has been completed on the other LCM.

Response 12

Request Denied: Too many LCM_REX_TESTS in progress

Explanation:

This message is displayed in response to the **TST REX NOW** command when the number of LCM's performing REX tests already matches the PARALLEL field of the LCM REX test tuple in table REXSCHED.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try increasing the PARALLEL field value and repeating the command (if the value was less than 4). If the PARALLEL value was already set to 4 then the user has to wait till the completion of at least one REX test to try again.

Response 13

Request Denied: Conflicting event(s) in progress

Explanation:

This message is displayed in response to the **TST COVREX NOW** or the **TST REX NOW** command when the Cside XPM to the posted LCM is already executing a REX test.

System action:

The system rejects the command and returns to the prompt.

User action:

The user can try again after REX has been completed on the Cside XPM.

Response 14

<LCM node> <site> <frame> <unit> will be put in takeover mode during COV REX test.

Do you want to continue with the COV REX test?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

This is displayed on the map in response to the **TST COVREX NOW** command. It warns the craftsperson that the COV REX test will place the LCM in simplex mode. It gives the craftsperson the choice of aborting or proceeding with the test at that point.

System action:

The system prepares to place the posted LCM in simplex mode for LCMCOV REX test. It displays the response and waits for the user to type in a yes/no response.

User action:

The user can type in y or yes to proceed with the COV REX test or enter a n or no to abort the command.

Notes

None

Examples

TST COVREX ON

*LCM HOST 00 0 is added to the list of LCMs
scheduled for a COV REX test.*

TST COVREX OFF

*LCM HOST 00 0 is excluded from the list of LCMs
scheduled for a COV REX test.*

TST COVREX QUERY

*LCM HOST 00 0 is excluded from the list of LCMs
scheduled for a COV REX test.*

Recent COV REX Results:

Last COV REX test was Mon Jun24 at 01:00:06; FAILED.

Unit 0:

No failure reported

Unit 1:

REX failed due to Power Converter failure.

Card reported: 6X53 Unit 0.

TST COVREX NOW

*LCM HOST 00 0 will be put in takeover mode during
COV REX test.*

Do you want to continue with the COV REX test?

Please confirm ("YES", "Y", "NO", or "N"):

Command name: REXTEST

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The REXTEST command is available at the CI prompt on the MAP. It is used to get information about REX tests on various types of nodes. The command has four options for the first parameter which are, SUSPEND, RESUME, QUERY and HELP. The SUSPEND option is used to temporarily disable a class of REX test until the end of the next maintenance window. The RESUME option reenables a suspended REX test class for the next maintenance window. The QUERY option for a particular class of REX test provides a list of nodes on which that REX test will be performed and also the settings for that REX test class. The HELP option provides information about what the particular REX test class does.

The second parameter for the REXTEST command is the type/class of REX test. This feature will add two new options to the second parameter of the REXTEST command which are, LCM_REX_TEST and LCMCOV_REX_TEST. The number of options for the second parameter will vary depending on the different types of nodes equipped in the office.

Warning

None.

Command syntax

```

REXTEST <Subcommand>{
    SUSPEND,
    QUERY,
    RESUME,
    HELP    }

    <Test>{
        ALL,
        (otherwise) [<Rex_test_id> {
            MS_REX_TEST,
            CM_REX_TEST,
            SLM_REX_TEST,
            .....
            LCM_REX_TEST
            LCMCOV_REX_TEST}}}]

```

Parameter definitions

Table 3-23 REXTEST Parameter Definitions

PARAMETER	VALUE	DEFINITION
Rex_test_id	LCM_REX_TEST	This value for the REX_TEST_ID option selects the LCM_REX_TEST class. The command will generate the required output relevant to this class.
Rex_test_id	LCMCOV_REX_TEST	This value for the REX_TEST_ID option selects the LCMCOV_REX_TEST class. The command will generate the required output relevant to this class.
Rex_test_id	ALL	This value selects all REX test classes including LCM_REX_TEST and LCMCOV_REX_TEST. The responses are repeated for all available REX test classes.

Responses

All responses and commands are valid on the SUPERNODE.

Response 1

<Rex_test_id> is suspended until <day> <date> <time>

Explanation:

This response is seen when the **REXTEST SUSPEND <Rex_test_id>** command is entered.

The Rex_test_id can be any of the classes of REX test available on the system, including LCM_REX_TEST and LCMCOV_REX_TEST.

If the command **REXTEST SUSPEND ALL** is entered, the response is repeated for each Rex_test_id.

System action:

The system temporarily suspends the class of REX test till the end of the next maintenance window.

User action:

None.

Response 2

<Rex_test_id> will be resumed on <day> <date> <time>

Explanation:

This response is seen when the **REXTEST RESUME <Rex_test_id>** command is entered.

The Rex_test_id can be any of the classes of REX test available on the system, including LCM_REX_TEST and LCMCOV_REX_TEST.

If the command **REXTEST RESUME ALL** is entered, the response is repeated for each Rex_test_id.

System action:

The system re-enables the class of REX test for the next maintenance window.

User action:

None.

Response 3

<Rex_test_id> Class Status: <Class_status> <Type>

Frequency: Every <period> days, Days disabled: <Days>

Objects(Nodes): Status:

<Node> <Status>

Explanation:

This response is generated by the **REXTEST QUERY <Rex_test_id>** command.

The Rex_test_id can be any of the classes of REX test available on the system, including LCM_REX_TEST and LCMCOV_REX_TEST.

The Class_status can be Enabled or Disabled.

The value of Type can be Critical or Non-Critical. The LCM_REX_TEST and LCMCOV_REX_TEST are Non_Critical tests.

The Period can be any number between 1 and 7 days.

A list of nodes belonging to the particular REX test class (Rex_test_id) is also displayed. Node refers to the name of the node and the status indicates if REX test has been Enabled or Disabled on that node.

If the command **REXTEST QUERY ALL** is entered, the response is repeated for each Rex_test_id.

System action:

The system displays the REX test settings for the class and also for each node in that class.

User action:

None.

Response 4

The LCM REX test performs the following steps:

1. SysB unit 0;
2. Perform INSV diagnostics on unit 1;
3. Perform OOS diagnostics on unit 0;
4. RTS unit 0;
5. SysB unit 1;
6. Perform INSV diagnostics on unit 0;
7. Perform OOS diagnostics on unit 1;
8. RTS unit 1;
9. Perform INSV tests on unit 0 not in take-over.
10. Perform ESA REX test if node is an ESA equipped RLCM/OPM.

The ESA REX test (step 10) is not performed in case of a manual LCM REX test.

Explanation:

This response is seen when the **REXTEST HELP LCM_REX_TEST** command is entered.

If the command **REXTEST HELP ALL** is entered, the help information for all REX test classes is displayed.

System action:

The system displays help information about the LCM_REX_TEST class.

User action:

None.

Response 5

The LCMCOV REX test performs the following steps:

1. *SysB unit 0;*
2. *Perform power converter and ringing generator voltage/continuity tests on unit 1;*
3. *RTS unit 0;*
4. *Perform power converter and ringing generator voltage/continuity tests on unit 0;*

Explanation:

This response is seen when the **REXTEST HELP LCMCOV_REX_TEST** command is entered.

If the command **REXTEST HELP ALL** is entered, the help information for all REX test classes is displayed.

System action:

The system displays help information about the LCMCOV_REX_TEST class.

User action:

None.

Notes

None

Examples

REXTEST SUSPEND LCM_REX_TEST

LCM_REX_TEST is suspended until THU. 1994/09/29 01:30:00.

REXTEST RESUME LCM_REX_TEST

LCM_REX_TEST will be resumed on WED. 1994/09/28 01:30:00.

REXTEST QUERY LCMCOV_REX_TEST

LCMCOV_REX_TEST Class Status: Enabled Non-critical

Frequency: Every 7 days, Days disabled: None

Objects(Nodes):Status:

LCM HOST 00 0Enabled

LCM HOST 00 1Disabled

RLCM REMT 10 0Enabled

REXTEST HELP LCMCOV_REX_TEST

The LCMCOV REX test performs the following steps:

1. SysB unit 0;
2. Perform power converter and ringing generator voltage/continuity tests on unit 1;
3. RTS unit 0;
4. Perform power converter and ringing generator voltage/continuity tests on unit 0;

Command name: QUERYPM

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The QUERYPM command when entered after posting an LCM on the MAP displays information about the LCM node. The change in the output of the command is the addition of LCMCOV REX information. The command displays information about the LCM REX test and also the LCMCOV REX test. The information about the next LCM for REX will no longer be displayed.

Warning

None.

Command syntax

QUERYPM

Parameter definitions

Table 3-24 QUERYPM Parameter Definitions

PARAMETER	VALUE	DEFINITION
NOT APPLICABLE		

Responses

Only the REX information in the response is being modified. The rest of the response is same as before.

Response 1

<LCM node> <site> <frame> <unit> is <status> the list of LCM types scheduled for a COV REX test.

COV REX on <LCM node> <site> <frame> <unit> has not been performed.

Explanation:

This information has been added to the existing response of the **QUERYPM** command.

Status can either be “included in” or “excluded from” depending on whether REX test has been enabled or disabled on that particular LCM.

The second line shows information about the last COV REX test performed on the LCM. In this case no test has been performed on it.

System action:

The system displays the information about the LCM.

User action:

None.

Response 2

<LCM node> <site> <frame> <unit> is <status> the list of LCM types scheduled for a COV REX test.

Last COV REX test was <day> <date> at <time>: <Result>

Explanation:

This information has been added to the existing response of the **QUERYPM** command.

Status can either be “included in” or “excluded from” depending on whether REX test has been enabled or disabled on that particular LCM.

The second line shows information about the last COV REX test performed on the LCM. In this case a test was performed on that LCM at the displayed date and time. The Result field can be PASSED or FAILED.

System action:

The system displays the information about the LCM.

User action:

None.

Notes

None.

Examples

No changes is tasks performed by the command.

Command name: NAG

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Command description

The NAG command generates a list of all the nodes in the office that are not in the INSV state or that have some troubles associated with them. The only position of this command that has been changed is a field in the output of the command. The field changed is the REX INFO field and the value of the field has been changed only for the LCM nodes. The feature AF5898 introduces a new type of REX test (LCMCOV REX test) on the LCM. Thus there are two REX tests that can be performed on the LCM. The REX INFO field of the NAG output displays a value assuming there is only one REX test per node. Due to this new case for the LCM nodes the value of the field has been modified to include information on both the LCM REX test and the LCMCOV REX test. A ':' separates the information for the two REX tests. The value on either side of the ':' is independent of the other. The value before the ':' denotes the information about the LCM REX test and the value after the ':' denotes the information about the LCMCOV REX test.

Warning

None.

Command syntax

NAG

Parameter definitions**Table 3-25 NAG Parameter Definitions**

PARAMETER	VALUE	DEFINITION
NOT APPLICABLE		

Responses

Only the REX INFO value for the LCM nodes in the response is being modified. The rest of the response is same as before. This document only covers the changed field REX INFO. For information on the other fields please refer to existing information on NAG command.

Response

<LCM node> <site> <frame> <unit> <Status> <REX _NFO> <Unit 0 status> <Unit 1 status>

Explanation:

For LCMs the REX_INFO field is split into two and separated by a colon ':'. The value before the colon pertains to the LCM REX test and the value after the colon pertains to the LCMCOV REX test. The value on either side of the colon can be one of the following: PASS, FAIL, NORUN, OFF, N/A.

PASS indicates the REX test passed.

FAIL indicates the REX test failed.

NORUN indicates the REX test has not been performed on this node.

OFF indicates the REX test has been turned off for this node.

N/A indicates the LCMCOV REX test does not apply to this LCM node.i.e. the type of LCM node does not support the COV test. This value can only be displayed for the LCMCOV REX test.

System action:

The system displays the information about the nodes in the office.

User action:

None.

Alarms

NOT APPLICABLE

Alarm name:

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AF5912mm.ab15

Directories

LCMDIR, LTPDIR

Table of new/modified directories

Table 3-26 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LCMDIR	Changed	N/A	SuperNode	RES
LTPDIR	Changed	N/A	SuperNode	RES
LTPLTADIR	Changed	N/A	SuperNode	RES

Accessing directory: LCMDIR

To access

MAPCI;MTC;PM;POST LCM ...

To return to CI

QUIT MAPCI

Accessing directory: LTPDIR

To access

MAPCI;MTC;LNS;LTP;POST ...

To return to CI

QUIT MAPCI

Accessing directory: LTPLTADIR

To access

MAPCI;MTC;LNS;LTP;LEVEL LTPLTA;POST ...

To return to CI

QUIT MAPCI

Commands

Table of New/modified commands

Table 3-27 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TST PM/UNIT/REX	Changed	N/A	LCMDIR
RTS PM/UNIT	Changed	N/A	LCMDIR
QUERYPM FLT	Changed	N/A	LCMDIR
LNTST/VDC/VAC/RES/CAP	Changed	N/A	LTPLTADIR

Command name: LCMDIR:TST PM/UNIT/REX

Command type

Menu

Command target

SuperNode

Command availability

RES

Command description

The TST command is used to manually test the entire LCM (PM) or one of its units (UNIT). Whenever the TST command is launched for a PM or UNIT, a new Talk Battery test will be performed on both LCM shelves. A message will be produced if the Talk Battery test fails or cannot be performed. A failure of the Talk Battery test will not cause the LCM to fail the TST, but the failure can cause alarms if the test has not failed previously.

Talk Battery testing is performed when the LCM is InSv or OOS. TST REX will test Talk Battery on both LCM shelves. Note that if both units of the LCM are OOS when a Talk Battery Failure exists, then each unit will report the failure since neither unit has control of the WLC reporting the fault. Also note while both units of the LCM are OOS, an actual over-voltage situation could be erroneously be reported as a Talk Battery failure; once the LCM is InSv, any over-voltage problem will not affect Talk Battery results.

See “Response TST/RTS Talk Battery failure” for description of failure message. See “Response TST/RTS Cannot test Talk Battery” for description of message when the Talk Battery test cannot be performed.

Warning

This feature will not introduce a risk of losing service or data.

Command syntax

No change to syntax.

Parameter definitions

No new parameters to define.

Command name: LCMDIR:RTS PM/UNIT**Command type**

Menu

Command target

SuperNode

Command availability

RES

Command description

The RTS command is used to return to service the entire LCM (PM) or one of its units (UNIT). Whenever the RTS command is launched for a PM or UNIT, a new Talk Battery test will be performed on both LCM shelves. A message will be produced if the Talk Battery test fails or cannot be performed. A failure of the Talk Battery test will not cause the LCM to fail the RTS, but the failure can cause alarms if the test has not failed previously.

See “Response TST/RTS Talk Battery failure” for description of failure message. See “Response TST/RTS Cannot test Talk Battery” for description of message when the Talk Battery test cannot be performed.

Warning

This feature will not introduce a risk of losing service or data.

Command syntax

No change to syntax.

Parameter definitions

No new parameters to define.

Command name: LCMDIR:QUERYPM FLT**Command type**

Menu

Command target

SuperNode

Command availability

RES

Command description

The QUERYPM FLT command is used to show the faults that currently exist for each unit of the LCM. The command will be modified to show the new ISTb reasons introduced by this feature.

See “Response ISTb Reason Talk Battery failure” for a description of the ISTb reason displayed when Talk Battery test fails for an LCM shelf. See “Response ISTB Reason Cannot test Talk Battery” for a description of the ISTB reason displayed when Talk Battery test cannot be performed for an LCM shelf.

Warning

This feature will not introduce a risk of losing service or data.

Command syntax

No change to syntax.

Parameter definitions

No new parameters to define.

Command name: LTPLTADIR:LNTST/VDC/VAC/CAP/RES

Command type

Menu

Command target

SuperNode

Command availability

RES

Command description

The LNTST/VDC/VAC/CAP/RES commands are used to tested the line posted in the LTPLTA MAP level. While these commands are running for a WLC, the WLC is temporarily placed in the MB state. If the last available WLC is busied, then the minor alarm will occur as described in section “Alarm name: Cannot test Talk Battery”. If termination of the command causes the first WLC to become available for Talk Battery testing, then the minor alarm will be cleared.

Warning

This feature will not introduce a risk of losing service or data.

Command syntax

No change to syntax.

Parameter definitions

No new parameters to define.

Responses

This section describes the response seen by the craftsperson for each of the previous commands.

Response TST/RTS Talk Battery failure

LCM <pmid> <unit> Tst Failed :Talk Battery Problem

Talk Battery failure: detected on shelf <ss> by card <pack>-<lsg>:<card>

Explanation:

The above response occurs when a Talk Battery failure is detected by the LCM being tested with the TST PM/UNIT/REX commands. Response visible on SuperNode.

<ss> is the physical LCM shelf number that failed Talk Battery.

<pack> is the NT pack code of the WLC that reported the failure.

<lsg> is the Line Sub Group of the WLC that reported the failure.

<card> is the card slot in the LSG of the WLC that reported the failure.

System action:

If a previously undetected Talk Battery failure occurs, then a critical PM alarm is raised and a ISTb reason is set for the LCM unit that reported the failure. A Talk Battery failure will not prevent the LCM PM/UNIT from RTSing.

User action:

Same action as described in LG section.

Response TST/RTS Cannot test Talk Battery

LCM <pmid> <unit> Tst Failed :Talk Battery Problem

Cannot test Talk Battery: shelf <ss> card <lsg>:<card> (or other WLCs) unavailable

Explanation:

The above response occurs when a Talk Battery cannot be tested on the LCM being tested with the TST PM/UNIT command. Response visible on SuperNode. The <ss>, <lsg>, and Lcard> fields are described in the previous section.

Other WLCs, on the same shelf, may also be unavailable. (Can use CI command QDNWRK to list all WLCs on the LCM shelf.) By “unavailable” is meant that the WLC, or its drawer, is OOS.

System action:

If the inability to perform the Talk Battery test has not been detected, then a minor PM alarm is raised and a ISTb reason is set for the LCM unit that reported the failure. An inability to test Talk Battery will not prevent the LCM PM/UNIT from RTSing.

User action:

Same action as described in LG section.

Response ISTb Reason Talk Battery failure

querypm flt

Node inservice troubles exist:

One or both Units inservice trouble

LCM UNIT 0 Inservice Troubles Exist:

Talk Battery Failure

LCM UNIT 1 ...

Explanation:

The above response occurs when a QUERYPM FLT is issued while a Talk Battery failure exists for one/both LCM shelves. Response visible on SuperNode.

Note that a single LCM UNIT can report Talk Battery problems for both shelves of the LCM, in which case the “Talk Battery Failure” or “Cannot test Talk Battery” (see next section) line will be repeated for the second shelf. For a single LCM unit to be ISTb due to both LCM shelves failing Talk Battery, one of the following must be true:

1. 1) The mate LCM unit is OOS, so the ISTb LCM unit is in TakeOver.
2. 2) Both LCMs are InSv/ISTb and the WLCs reporting the Talk Battery failures are in even LSGs. In this case, LCM Unit 0 will be ISTb for both shelves.
3. 3) Both LCMs are InSv/ISTb and the WLCs reporting the Talk Battery failures are in odd LSGs. In this case, LCM Unit 1 will be ISTb for both shelves.

System action:

A critical alarm “*C*” will appear under the PM header of the MAP display. The number of LCMs affected will also be shown under the header.

User action:

Same action as described in LG section.

Response ISTb Reason Cannot test Talk Battery

querypm flt

Node inservice troubles exist:

One or both Units inservice trouble

LCM UNIT 0 Inservice Troubles Exist:

Cannot test Talk Battery

LCM UNIT 1 ...

Explanation:

The above response occurs when the QUERYPM FLT command is issued while Talk Battery cannot be tested on one/both LCM shelves. Response visible on SuperNode.

Note that a single LCM UNIT can report Talk Battery problems for both shelves of the LCM, in which case the “Talk Battery Failure” (see previous section) or “Cannot test Talk Battery” line will be repeated for the second shelf.

System action:

The minor alarm will appear under the PM header of the MAP display by showing the number of LCMs that could not test Talk Battery.

User action:

Same action as described in LG section.

Notes

The Talk Battery test failures and ISTb reasons can only appear when the following three conditions are true:

1. TALK_BATTERY_ALARM parameter in OFCENG is enabled.
2. LCM unit is InSv or ISTb.
3. LCM type (e.g. LCME) is supported by this feature.

Examples

Examples are provided above in the description for each Response.

Alarms

TMS	
0	Quit
2	Post
3	ListSet
4	
5	Trnsl_
6	Tst_
7	Bsy_
8	RTS_
9	OffL
10	LoadPM_
11	Disp_
12	Next
13	SwAct
14	QueryPM
15	DCH
16	OCDL
17	PERFORM
18	ISG

ailure

e the alarm

ust be true before this alarm will be raised:
4 parameter in OFCENG is enabled.

upported by this feature.

l by audit or diagnostics.

ols the duration of this alarm. Typically, the
e Talk Battery failure before the alarm will
rected, LCM diagnostics (e.g. the manual or
automatic TST PM command) will clear the alarm.

Taking the LCM OOS clears the Talk Battery critical alarm.

Disabling the TALK_BATTERY_ALARM parameter will automatically clear any Talk Battery alarms.

Alarm name: Cannot test Talk Battery**Conditions required to raise the alarm**

The following conditions must be true before this alarm will be raised:

1. TALK_BATTERY_ALARM parameter in OFCENG is enabled.
2. LCM unit is InSv or ISTb.
3. LCM type (e.g. LCME) is supported by this feature.
4. Inability to test Talk Battery must be reported by audit or diagnostics.

Duration of the alarm

There is no timer that controls the duration of this alarm. Typically, the craftsperson must correct the problem before the alarm will clear. Problem is corrected by provisioning a WLC on the shelf, or by returning to service an existing WLC. Once the problem is corrected, LCM diagnostics (e.g. the manual or automatic TST PM command) will clear the alarm.

Taking the LCM OOS clears the Talk Battery minor alarm.

Disabling the TALK_BATTERY_ALARM parameter will automatically clear any Talk Battery alarms.

AF5930mm.ab02**Directories****Table of new/modified directories****Table 3-28 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LGCDIR	Changed		*See Note	RES

*Note: The LGCDIR directory is maintained on all currently supported CM platforms.

Although the LGCDIR directory is a generic directory for LGCs, the new OCDL option only appears when a TMS is posted.

Accessing directory: LGCDIR

To access

Whenever a TMS is posted at the PM MAP level, the LGCDIR directory is accessed. The commands used to access this directory from the CI environment are as follows:

```
>mapci; mtc; pm; post tms #
(# represents the number of the TMS which is to be posted.)
```

To return to CI

To return from this directory to the CI environment, the following command must be issued from the command line of a posted TMS with one of two possible parameters:

```
The first is:>quit all
The other is:>quit mapci
```

Commands

Table of New/modified commands

Table 3-29 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
OCDL	NEW		LGCDIR
ISG	CHANGED		LGCDIR
DCH	CHANGED		LGCDIR

Command name: OCDL

Command type

The new 'OCDL' command is available from the menu of a posted TMS. It occupies the sixteenth position on the menu which was previously unused. A diagram of the newly revised TMS menu is shown in the following figure:

Figure 3-9TMS MAP Level Menu

Command target

The command target includes all currently supported CM platforms.

Command availability

The 'OCDL' command is resident (res) in the load.

Command description

The 'OCDL' command allows a craftsperson to access the OCDL MAP level via the menu of a posted TMS. Entering '16' is a valid alternative to entering 'OCDL' at the TMS command line.

Warning

Not applicable.

Command syntax

Whenever a craftsperson requests help on the 'OCDL' command from the command line of a posted TMS, the help panel displays the following information:

OCDL:COMMAND TO ENTER THE OCDL LEVEL

Parameter definitions

No parameters appear in the OCDL command syntax. The OCDL MAP level is accessed simply by entering 'OCDL'.

Responses**Response**

"TMS not configured as OC in table LTCINV."

Explanation:

This message appears when a craftsperson attempts to select the 'OCDL' command from a posted TMS that does not have OC datafilled as an optional attribute (field OPTATTR) in table LTCINV.

System action:

When this message is displayed, control is returned to the TMS MAP level.

User action:

No user action is required in response to this message.

Notes

The 'OCDL' command is only available from the menu of a posted TMS.

Examples

The functionality that the 'OCDL' command provides access to is provided by feature AN1134, ETMS OC: Maintenance and Logs. Please refer to the appropriate DDOC sections of that feature for further details on the various tasks that are available at the OCDL MAP level.

Command name: ISG**Command type**

The existing 'ISG' command is available from the menu of a posted TMS.

Command target

The command target includes all currently supported CM platforms.

Command availability

The 'ISG' command is resident (res) in the load.

Command description

The 'ISG' command allows a craftsperson to access the ISG MAP level via the menu of a posted TMS. This allows the user to ability to perform maintenance on ISGs on a TMS.

Warning

Not applicable.

Command syntax

Whenever a craftsperson requests help on the 'ISG' command from the command line of a posted TMS, the help panel displays the following information:

ISG: COMMAND TO ENTER THE ISG LEVEL

Parameter definitions

Not applicable.

Responses

“TMS is configured as OC in table LTCINV.”

Explanation:

This message appears when a craftsperson attempts to select the ‘ISG’ command from a posted OC TMS. The ISG MAP level is not accessible on OC TMSs.

System action:

When this message is displayed, control is returned to the TMS MAP level.

User action:

No user action is required in response to this message.

Notes

None.

Examples

None.

Command name: DCH**Command type**

The existing ‘DCH’ command is available from the menu of a posted TMS.

Command target

The command target includes all currently supported CM platforms.

Command availability

The ‘DCH’ command is resident (res) in the load.

Command description

The 'DCH' command allows a craftsperson to access the DCH MAP level via the menu of a posted TMS. This allows the user to ability to perform maintenance on DCHs on a TMS.

Warning

Not applicable.

Command syntax

Whenever a craftsperson requests help on the 'DCH' command from the command line of a posted TMS, the help panel displays the following information:

DCH: COMMAND TO ENTER THE DCH LEVEL

Parameter definitions

Not applicable.

Response

"TMS is configured as OC in table LTCINV."

Explanation:

This message appears when a craftsperson attempts to select the 'DCH' command from a posted OC TMS. The DCH MAP level is not accessible on OC TMSs.

System action:

When this message is displayed, control is returned to the TMS MAP level.

User action:

No user action is required in response to this message.

Notes

None.

Examples

None.

Alarms

There are no alarms generated by this feature.

AF5960mm.ac10**Directories**

LN_LTP_DIR

Table of new/modified directories**Table 3-30 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LTP	Changed	N/A	S/DMS	RES

Accessing directory:

LN_LTP_DIR

To access

MAPCI;MTC;LNS;LTP

To return to CI

QUIT ALL

Commands**Table of New/modified commands****Table 3-31 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
POST	Changed	N/A	LTP

Command name: Post.**Command type**

Menu.

Command target

SuperNode.

Command availability

RES.

Command description

This feature adds the capability of displaying the state of a remote RDT line at the DMS MAP. A new field is added to show the remote RDT line state at the LTP level of the MAP. In addition an audit is run periodically (every 5 minutes) to update the line states of all the RDT lines posted at the control position of the LTP level of various MAPs.

Warning

Not applicable.

Command syntax

Unchanged.

(Example: POST L <LEN>)

Parameter definitions

Table 3-32 POST Parameter Definitions

PARAMETER	VALUE	DEFINITION
Unchanged		

Responses

Whenever a line is posted at the LTP level, **UNK@RDT** (unknown at RDT) is displayed in the new field while a background process retrieves the remote line state from the RDT. Once the remote line state is retrieved it is mapped as per table 1 in AF5960FN and displayed in the new field. This field is also updated periodically (every 5 minutes) by the audit process.

Response 1

The new LTP level of the MAP at the time of initial post looks as follows:

rtps-t1.map-async.rtps.bnrtp-dms_0											
CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL		
CM Flt	MSpair	AMA B	.	PMLOAD	.	.	.	.	.		
M	*C*	*C*									
LTP											
0	Quit	POST	DELQ	BUSYQ	PREFIX						
2	Post_										
3		LCC PTY RNG	LEN.....	DN	STA F S LTA	TE	RESULT				
4		1FR	RDT1 04 0 01 03	351 3030	IDL						
5	Bsy										
6	RTS										
7	Diag	UNK@RDT									
8											
9	AlmStat										
10	CktLoc	LNS:									
11	Hold	LTP:									
12	Next										
13											
14											
15											
16	Prefix										
17	LCO_										
18	Level_										
ADMIN											
Time 09:13 >											

Explanation

The new field displays **UNK@RDT** at the time of the initial post, informing the craftsperson that the line state at the RDT is not known at this time.

System action

After displaying **UNK@RDT** at the time of the initial post a background process is started to query the remote line state. When the remote line state becomes available all the MAPs which have this line posted at the control position are updated to reflect the actual RDT remote line state

If the background process fails to retrieve the remote line state, all the MAPs which have this line posted at the control position are updated to display **UNK@RDT**. In the case of a successful retrieval of the remote line state all the MAPs which have this line posted are updated to display the latest line state. Below is the list and a brief description of all the possible messages that may be displayed in the new field:

IS@RDTIn Service at RDT.

This state indicates that the line at the RDT is ready for call processing.

IS-CPB@RDTIn Service Call Processing Busy at RDT.

This state indicates that the line at the RDT is processing a call at this time.

IS-TBL@RDTIn Service Trouble at RDT.

This state indicates that the line at the RDT is in trouble and is not available for call processing, etc.

OOS@RDTOut Of Service at RDT.

This state indicates that the line at the RDT has been taken out of service (for maintenance, etc.) and as such no call processing could be performed at this time.

IS-TST@RDTIn Service Test at RDT.

This state indicates that the line at the RDT is under test initiated from the RDT and as such it is not accessible from the DMS.

User action

None.

This new field is cleared whenever a non-RDT line is posted in the control position at the LTP level, or when a RDT line is moved from the control to the hold position, or when the craftsperson quits out of the LTP level of the MAP.

Response 2

This LTP level of the MAP looks as follows when a non-RDT line is posted in the control position.

rtps-t1.map-async.rtps.bnrrtp-dms_0

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
CM Flt	MS pair	AMA B	.	PMLOAD	.	.	.	.	.
M	*C*	*C*							
LTP									
0 Quit	POST		DELQ		BUSYQ		PREFIX		
2 Post_									
3	LCC PTY RNG	LEN.....	DN	STA F S LTA	TE	RESULT			
4	1FR	RCU2 04 0 01 05	291 3030	IDL					
5 Bsy									
6 RTS									
7 Diag									
8									
9 AlmStat									
10 CktLoc	LNS:								
11 Hold	LTP:								
12 Next									
13									
14									
15									
16 Prefix									
17 LCO_									
18 Level_									
ADMIN									
Time 09:13									

Explanation

The new field is cleared whenever a non-RDT line is posted in the control position or whenever a RDT-line is moved from the control to the hold position, or when the MAP session is terminated.

System action

The new field is cleared.

User action

None.

Notes

None.

Examples

POST L <LEN>

POST DN <DN>

Alarms

Not Applicable.

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AF7046mm.aa15

Directories

There is one directory affected by this feature: IRLINK

Table of new/modified directories

Table 3-33 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
IRLINK	Changed	N/A	N/A	N/A

Accessing directory:

IRLINK

To access

Command used to enter this directory:

Mapci;Mtc;PM;Post <RCC node>;IRLINK

To return to CI

Command used to exit this directory to CI: Quit all

Commands

Table of New/modified commands

Table 3-34 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
BSY	Changed	N/A	N/A
QueryIrr	Changed	N/A	N/A

Command name:

BSY

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command busies the Interlink that is specified as a parameter.

The craftsperson, prior to this feature, upon activating the BSY interlink command, was notified of 'Potential loss of calls on that interlink', i.e. interswitched calls will be lost, and was prompt to continue.

The BSY interlink command is now the trigger for reverting interswitched calls to the network, and therefore as long as there are available C-side channels, this command will not drop these calls anymore.

- In order to reduce the risk of calls dropping, the craftsperson has to change the field INTERSW in table IRLNKINV to 'N' so that no new interswitched calls are established (please refer to the DS section). If the field's value is 'Y' the following message is displayed and the BSY command is aborted:

'interswitched calls should be disabled before an interlink is busied'

- Before the BSY command is executed the craftsperson is informed of the number of established interswitched calls and of the possibility of calls dropping.

'<n> interswitched calls will be reverted to the network. Potential loss of calls on the interlink if there are no available C-side channels',

The BSY command will be performed only after the craftsperson's confirmation.

Warning

Definition of dual configuration while the shelves are inservice will cause ESA static data mismatch since Dual ESA SD is missing in both spouses (it is downloaded when the shelf is RTSed or during nightly download of ESA static data). The shelves' units will be marked ISTB (minor alarm) with ESA STATIC DATA MISMATCH so that the next time each shelf swacts the CC would reload DESA data¹. The same process happened, prior to this feature, when the field ESAFORCE is changed from 'N' to 'Y' while the shelf is INSV.

Command syntax

N/A

Parameter definitions**Command name:**

QueryIr

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command displays carrier information for interlinks.

Warning

N/A

Command syntax

N/A

¹Note that ESA data is valid (althouth the DESA SD is not downloaded yet) except for the fact that no interswitching calls can be made while in DESA until new data is downloaded .

Parameter definitions

N/A

Responses

BSY command

- If the value of field INTERSW in table IRLNKINV is 'Y' when the BSY command is issued a message is displayed:

'interswitched calls should be disabled before an interlink is busied'

The BSY command is aborted.

- If the INTERSW field is 'N', the craftsperson prompt to continue will state that:

'<n> interswitched calls will be reverted to the network. Potential loss of calls on the interlink if there are no available C-side channels',

i.e. interswitched calls will be reverted to the network, but if there are no free C-side channels then the calls will be dropped. The number <n> indicates the number of established interswitched calls counted when the BSY command was issued.

QueryIr command

When QueryIr command is issued, an indication of interswitching ability is displayed:

- 'Interswitching is ENABLED' - when the INTERSW field in table IRLNKINV is 'N'.
- 'Interswitching is DISABLED' - when the INTERSW field in table IRLNKINV is 'Y'.

Figure 1 shows an example of QueryIr display

Figure 3-10 QueryIr display

QueryIr

Interswitching is ENABLED

IR	FROM	TO	C	ALRM	SLIP	FRME	BER	STATE
0 RCC2	0, 0 RCC2	1, 0	.		0	0		OK
1 RCC2	0, 8 RCC2	1, 8	.		0	0		OK

Dual definition for INSV RCC nodes

The ISTB Minor Alarm with reason ESA SD Mismatch, is raised in case of Dual definition for INSV RCC nodes. This is done because the Dual ESA SD is not loaded for single RCC node, and must be loaded to both spouses when defining Dual configuration in order to support interswitched calls in Dual ESA.

The same process happened, prior to this feature, when the field ESAFORCE is changed from 'N' to 'Y' while the shelf is INSV.

Alarms

In case of Dual definition to INSV RCC nodes, the shelves' units will be marked ISTB (minor alarm) with ESA STATIC DATA MISMATCH, because DESA SD must to be downloaded to the units. The the next time each shelf swacts the CC would reload DESA data.

AF6047.aa12

Directories

There is one directory affected by this feature: IRLINK

Table of new/modified directories

Table 3-35 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
RCC	Changed	N/A	N/A	N/A
IRLINK	Changed	N/A	N/A	N/A

Accessing directory:

RCC

To access

Command used to enter this directory:

Mapci;Mtc;PM;Post <RCC node> <RCC no>

To return to CI

Command used to exit this directory to CI: Quit all

Accessing directory:

IRLINK

To access

Command used to enter this directory:

Mapci;Mtc;PM;Post <RCC node> <RCC no>;IRLINK

To return to CI

Command used to exit this directory to CI: Quit all

Commands

Table of New/modified commands

Table 3-36 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
BSY	Changed	N/A	IRLINK
Querylr	Changed	N/A	IRLINK
INTERSW	NEW	N/A	IRLINK
RTS	Changed	N/A	IRLINK
QueryPM	Changed	N/A	RCC

Command name:

BSY

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command busies the Interlink that is specified as a parameter. The craftsperson, prior to this feature, upon activating the BSY interlink command, was notified of 'Potential loss of calls on that interlink', i.e. interswitched calls will be lost, and was prompted to continue.

The BSY interlink command is now the trigger for reverting interswitched calls to the network, and therefore as long as there are available C-side channels, this command will not drop these calls anymore.

- In order to reduce the risk of calls dropping, the craftsperson has to change the interswitching status using the INTERSW DISABLE command in the IRLINK MAP level so that no new interswitched calls are established. If the field's value is 'Y' the following message is displayed and the BSY command is aborted:

New interswitched calls must be disabled before activating the BSY interlink command.

- Before the BSY command is executed the craftsperson is informed of the number of established interswitched calls and of the possibility of calls dropping.

'<n> interswitched calls will be reverted to the network. Potential loss of calls on the interlink if there are no available C-side channels',

The BSY command will be performed only after the craftsperson's confirmation.

Warning

Definition / Removal of dual configuration while the shelves are inservice will cause ESA static data mismatch since Dual ESA SD is not updated in both spouses (it is downloaded when the shelf is RTSed or during nightly download of ESA static data). The shelves' units will be marked ISTB (minor alarm) with ESA STATIC DATA MISMATCH so that the next time each shelf RTSed the CC would reload DESA data¹. The same process happened, prior to this feature, when the field ESAFORCE is changed from 'N' to 'Y' while the shelf is INSV.

Command syntax

N/A

Parameter definitions

N/A

Command name:

QueryIr

¹Note that ESA data is valid (although the DESA SD is not downloaded yet) except for the fact that no interswitching calls can be made while in DESA until new data is downloaded.

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command displays carrier information for interlinks. The INTERSW information is added to this command.

Warning

N/A

Command syntax

N/A

Parameter definitions

N/A

Command name:

INTERSW

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command Enables / Disables new interswitched calls. It is used before / after BSYing an interlink in order to prevent / allow new interswitched calls.

Warning

N/A

Command syntax

N/A

Parameter definitions

INTERSW ENABLE - enables new interswitched calls.

INTERSW DISABLE - disables new interswitched calls.

Command name:

RTS

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command RTS's an interlink.

Warning

A new warning is added in case that RTSing an interlink is succeeded and INTERSW is disabled:

Be aware that Interswitching is Disabled.

Command syntax

N/A

Parameter definitions

N/A

Command name:

QueryPM

Command type

MENU

Command target

SuperNode. BRISC

Command availability

RES

Command description

This command displays PM information for PMs. The INTERSW information is added to this command.

Warning

N/A

Command syntax

N/A

Parameter definitions

N/A.

Responses

BSY command

- If the value of field INTERSW is 'Y' when the BSY command is issued a message is displayed:

New interswitched calls must be disabled before activating the BSY interlink command.

The BSY command is aborted.

- If the INTERSW field is 'N', the craftsperson prompt to continue will state that:

'<n> interswitched calls will be reverted to the network. Potential loss of calls on the interlink if there are no available C-side channels',

i.e. interswitched calls will be reverted to the network, but if there are no free C-side channels then the calls will be dropped. The number <n> indicates the number of established interswitched calls counted when the BSY command was issued.

QueryIr command

When QueryIr command is issued, an indication of interswitching ability is displayed:

- 'Interswitching is ENABLED' - when the INTERSW field in the DRSC_DATA structure is 'Y'.
- 'Interswitching is DISABLED' - when the INTERSW field in the DRSC_DATA structure is 'N'.

Figure 3-11 shows an example of QueryIr display

Figure 3-11 QueryIr display

QueryIr

Interswitching is ENABLED

IR	FROM	TO	C	ALRM	SLIP	FRME	BER	STATE
0 RCC2	0, 0 RCC2	1, 0	.		0	0		OK
1 RCC2	0, 8 RCC2	1, 8	.		0	0		OK

INTERSW command

When the INTERSW ENABLE command is activated then:

- In case that interswitching is already enabled the following message is displayed:

Interswitching is already Enabled.

- In case that interswitching is disabled the following message is displayed:

Interswitching is Enabled.

When the INTERSW DISABLE command is activated then:

- In case that interswitching is already disabled the following message is displayed:

Interswitching is already Disabled.

- In case that interswitching is enabled the following message is displayed:

Interswitching is Disabled.

RTS command

The following warning is displayed in case that RTSing an interlink is succeeded and INTERSW is disabled:

Be aware that Interswitching is Disabled.

QueryPM command

When QueryPM command is issued, an indication of interswitching ability is displayed:

- 'Dual Interswitching is ON' - when the INTERSW field is 'Y'.
- 'Dual Interswitching is OFF' - when the INTERSW field is 'N'.

Figure 3-12 QueryPM display**QueryPM**

PM Type: RCC PM No.: 2 PM Int. No.: 1 Node_No.: 20

PMs Equipped: 20 Loadname: ESR05AR

ESA equipped: YES IntraSwitching is ON

Dual InterSwitching is ON

WARM SWACT is supported but not possible: node redundancy lost

....

....

Alarms

In case of Dual definition / removal to INSV RCC nodes, the shelves' units will be marked ISTB (minor alarm) with ESA STATIC DATA MISMATCH, because DESA SD must to be downloaded to the units.

AF6052mm.aa12**Directories****Table of new/modified directories****Table 3-37 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

N/A

Accessing directory:

N/A

To access

N/A

To return to CI**Commands**QLAYER
RLAYER**Table of New/modified commands****Table 3-38**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QLAYER	CHANGED		LTPISDNDIR
RLAYER	CHANGED		LTPISDNDIR

Command name:QLAYER, RLAYER**Command type**

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command target

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command availability

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command description

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Warning

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command syntax

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Parameter definitions

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Table 3-39 QLAYER, RLAYER Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

MVI ISDN lines required only one change for the QLAYER and RLAYER responses. The following line will not be displayed as part of any of QLAYER and RLAYER responses for MVI ISDN lines:

“Linecard Clockdyhr:min:sec”

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section for all other response documentation.

Explanation:

System action:

User action:

Notes

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Examples

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Alarms

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AF6052mm.aa32**Directories****Table of new/modified directories****Table 3-40 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

N/A

Accessing directory:

N/A

To access

N/A

To return to CI**Commands**QLAYER
RLAYER**Table of New/modified commands****Table 3-41 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QLAYER	CHANGED		LTPISDNDIR
RLAYER	CHANGED		LTPISDNDIR

Command name: QLAYER, RLAYER**Command type**

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command target

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command availability

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command description

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Warning

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Command syntax

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Parameter definitions

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Table 3-42 QLAYER, RLAYER Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

MVI ISDN lines required only one change for the QLAYER and RLAYER responses. The following line will not be displayed as part of any of QLAYER and RLAYER responses for MVI ISDN lines:

“Linecard Clockdyhr:min:sec”

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section for all other response documentation.

Explanation:

System action:

User action:

Notes

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Examples

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Alarms

Refer to AQ0788, Layer 2 High Protocol Abnormality Rate (CC), MM section.

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AF6053mm.aa07**Directories**

MVSIZECI

Table of new/modified directories**Table 3-43 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
MVSIZECI	NEW		SUPERNODE	RES

Accessing directory: MVSIZECI**To access**

MVSIZECI

To return to CI

QUIT

Commands

QUERYSIZE

Table of New/modified commands**Table 3-44 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUERYSIZE	NEW		MVSIZECI

Command name: QUERYSIZE**Command type**

Command is NON-MENU.

Command target

Command target is SUPERNODE.

Command availability

Command availability is RES.

Command description

QUERYSIZE displays the size of RDT on an SMA queried. The craftperson enters the SMA type and number to query. This command enables a craftperson to determine the size of RDT that can be datafill on a queried SMA. The size of RDT is catagorized as follows:

Table 3-45 Size of RDT

Size	Max Lines/RDT
SMALL	672
MEDIUM	1344
LARGE	2048

Warning

Not Applicable.

Command syntax

QUERYSIZE <SMA TYPE> {SMA, SMA2}
 <SMA NO> {1 TO 255}

Parameter definitions

Table 3-46 QUERYSIZE Parameter Definitions

PARAMETER	VALUE	DEFINITION
SMA TYPE	SMA, SMA2	The type of SMA platform.

Table 3-46 QUERYSIZE Parameter Definitions

PARAMETER	VALUE	DEFINITION
SMA NO	1 to 255	The external number of SMA.

Responses

The size of RDT will be displayed as either NIL, SMALL, MEDIUM or LARGE.

A failure message will be displayed if any error occurs.

Response Formats

“The Size of RDTs on <SMA TYPE> <SMA NO> =
<SIZE>
(Max Lines/RDT = <MAXLINES>).

Total RDTs off <SMA TYPE> <SMA NO>= <NO OF RDTS>
(Max <SIZE> RDTs = <MAXRDTs>).”

“Unable to query SMA size.”

Explanation:

The success response displays the size of RDT, Max Lines/RDT supported in that size category, the total number of RDTs datafill on SMA at that time and Max number of RDTs allowed in the size category.

The failure message indicates the command was unable to query the size of RDT. This can occur if SMA is not provisioned or a software error has occurred.

System action:

None.

User action:

On a failure, the craftsperson should ensure that SMA being queried is provisioned.

Examples

a) QUERYSIZE SMA 1

672). Size of RDTs on SMA 1 = SMALL (Max lines/RDT =
8). Total RDTs off SMA 1 = 6 (Max SMALL RDT =

b) QUERYSIZE SMA 2

672). Size of RDTs on SMA 2 = SMALL (Max lines/RDT =
5, DCH Total RDTs off SMA 2 = 4 (Max SMALL RDT =
present).

c) QUERYSIZE SMA 3

AF6054mm.aa05**Directories****Table of new/modified directories****Table 3-46New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
LOADMGMTDIR	Changed		Both	Res
ACDSHOWDIR	Changed		Both	Res

Accessing directory: LOADMGMTDIR**To access**

>ACDSHOW; LOADMGMT

To return to CI

>QUIT; QUIT

Accessing directory: ACDSHOWDIR**To access**

>ACDSHOW

To return to CI

>QUIT

Commands

Table of New/modified commands

Table 3-47 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
CHANGE	CHANGED		LOADMGMTDIR
LOGINID	CHANGED		ACDSHOWDIR
GROUPINFO	CHANGED		ACDSHOWDIR

Command name:CHANGE

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This CHANGE command allows a customer to alter aspects of ACD features for individual agents or groups of agents. This feature will allow the customer to change the location of Call Forcing Tone for an individual agent or to change the default Call Forcing Tone location for an ACD Group.

Command syntax

>CHANGE FORCING ACDGRP <ACD GROUP> <TONE_DEST>

>CHANGE FORCING LOGINID <ACD AGENT LOGIN ID>
<TONE_DEST>

Parameter definitions

Table 3-48 CHANGE Parameter Definitions

PARAMETER	VALUE	DEFINITION
ACD GROUP	VECTOR	This is the ACD group to which the change applies
LOGINID	0001 To 9999	This is the unique ACD Agent Login Id to which the change applies
TONE_DEST	HSET, BASE, NONE	This value indicates the location of Call Forcing Tone. NONE indicates that the feature is inactive.

Responses

Response 1

***ERROR: ACD Group <ACD GROUP> Does Not Have FORCING Option

Explanation:

This error is output if the customer attempts to change the Call Forcing Tone Location on an ACD Group that does not currently have the FORCING option defined in table ACDGRP.

System action:

Command Rejected.

User action:

Datafill FORCING option in Table ACDGRP.

Response 2

***ERROR: ACD AGENT <LOGIN ID> Does Not Have FORCING Option

Explanation:

This error is output if the customer attempts to change the Call Forcing Tone Location on an ACD Agent that does not currently have the FORCING option defined in tables ACDLOGIN or ACDENLOG.

System action:

Command Rejected.

User action:

Datafill FORCING option in Table ACDLOGIN or ACDENLOG.

Notes

"FORCING" must be assigned to a group in table ACDGRP before that group can have its Call Forcing tone destination updated by the "CHANGE" command.

"FORCING" must be assigned to an agent in table ACDLOGIN or Table ACDENLOG before that agent can have its Call Forcing tone destination updated by the "CHANGE" command.

Datafill for FORCING for an ACDGRP will override any FORCING datafill for agents within that group.

Examples

```
LOADMGMT>> CHANGE FORCING ACDGRP ACDGRP1 HSET
> CHANGE command for ACD group ACDGRP1
    Type of Change:FORCING
    Current Value:BASE
    New Value:HSET
```

```
    Please confirm ("YES" or "NO")
> YES
    ACD Group ACDGRP1 has been Updated
    Warning :Journal File is Inactive
```

```
LOADMGMT>> CHANGE FORCING LOGINID 1234 BASE
> CHANGE command for ACD AGENT 1234
    Type of Change:FORCING
    Current Value:HSET
    New Value:BASE
```

```
    Please confirm ("YES" or "NO")
> YES
    ACD Agent 1234 has been Updated
    Warning :Journal File is Inactive
```

Command name:LOGINID

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This LOGINID command allows a customer to view aspects of ACD features for individual agents. This feature will alter the FULL mode of LOGINID to display the Call Forcing Tone Location.

Command syntax

>loginid <Id?> [<Form?>] [<Custgrp? Used to identify partition>]

Parameter definitions

Table 3-49 LOGINID Parameter Definitions

PARAMETER	VALUE	DEFINITION
LOGINID	0001 To 9999	This is the unique ACD Agent Login Id to which the change applies
FORM	BRIEF or FULL	This value indicates whether to use the brief or full form of the output. Call Forcing Tone and Tone Destination only appear in the Full mode..
Custgroup	Customer group name	The name of Customer Group is used to determine which partition to use if table ACDENLOG is in use.

Responses

N/A

Notes

In Releases CNA04 - CNA06 Table KSETLINE is still available for datafilling FORCING. If Forcing Datafill for a given loginid is drawn from KSETLINE, Tone destination will be listed as "DEFAULT." Note also that datafill in table ACDLOGIN or ACDENLOG will override KSETLINE datafill for both ACDSHOW and in actual operation.

Examples

Normal Example: Datafill from Table ACDLOGIN or ACDENLOG

```
ACDSHOW>>
```

```
>loginid 2001 full
```

```
<Custgrp> parm not entered.
```

```
Partition number defaults to zero.
```

```
-----  
Agent Position ID:0101
```

```
Agent Login ID: 2001
```

```
Status:          IDLE
```

```
Loginid_Partition:    000
```

```
Agent :            LEN HOST 00 0 01 02  DN 6217702  KEY  1
```

```
ACD Group:         ACDPSAPMDC
```

```
ACD Subgroup:      0
```

```
SCAI Agent:        NO
```

```
Table ACDLOGIN related information:
```

```
No Password assigned.
```

```
No Customer Group assigned.
```

Call Forcing: HSET (New)

CNA04 - CNA06 Example: Datafill from Table KSETLINE

ACDSHOW>>

>loginid 2001 full

<Custgrp> parm not entered.

Partition number defaults to zero.

Agent Position ID:0101

Agent Login ID: 2001

Status: IDLE

Loginid_Partition: 000

Agent : LEN HOST 00 0 01 02 DN 6217702 KEY 1

ACD Group: ACDPSAPMDC

ACD Subgroup: 0

SCAI Agent: NO

Table ACDLOGIN related information:

No Password assigned.

No Customer Group assigned.

Call Forcing: Default (New)

Command name:GROUPINFO

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

The GROUPINFO command allows a customer to view aspects of ACD features ACD Groups of agents. This feature will add a field to display whether the Call Forcing feature is active and display Call Forcing Tone Location.

Command syntax

```
>groupinfo <Identifier?> {ALL,  
                                GROUP <Acd_grp?> STRING,  
                                ACDDN <Npa?> {0 TO 999}  
                                <Office code?> {0 TO 999}  
                                <Extension number?> {0 TO 9999}}
```

Parameter definitions

Table 3-50 GROUPINFO Parameter Definitions

PARAMETER	VALUE	DEFINITION
IDENTIFIER	ALL, GROUP, ACDDN	This is parameter identifies an ACD group or specifies all ACD groups.

Responses

N/A

Notes

N/A

Examples

```
ACDSHOW>>
```

>groupinfo group ACDPSAPMDC

=====

ACD Group: ACDPSAPMDC

=====

Primary ACDDN: 613 621 2112

Trunk Priority: 0

Line Priority: 0

AcD-Dn Name: ACDPSAPMDC

Supplementary ACDDN: 613 621 2102

Dn Priority: 1

No Name Associated

Customer Group: E911MDC

Loginid Partition: 0

Ringing Threshold: 15 Secs

Threshold Route: OFRT 911

Night Service Route: OFRT 911

Max Call Queue Size: 5

Max Call Queue Wait Time: 120 Secs

Management Report Option: NO

SCAI Group Option: NO

Administration Group: 0

Number of Agents in Group: 2

Max Call Transfer Queue Size: 5

AcD Display Digits: 0

OrgAnn: NO

Forced Night Service: NO

Call Forcing: BASE (New)

Command name:AGTPOS**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

AGTPOS is a subcommand of ACDSHOW which allows the user to display a list of ACD agent positions. This feature alters the FORCING field to display the tone destination if an agent with Forcing is currently logged into the set..

Command syntax

```
>AGTPOS <How?> {ALL <Sgrps?> {ALL [<Form?> {BRIEF,
                                FULL}},
                                SUBGROUP <Acd_sgrp?> {0 TO 255}
                                [<Form?> {BRIEF,
                                FULL}}},
                                GROUP <Acd_grp?> STRING
                                <Sgrps?> {ALL [<Form?> {BRIEF,
                                FULL}},
                                SUBGROUP <Acd_sgrp?> {0 TO 255}
                                [<Form?> {BRIEF,
                                FULL}}},
                                POSID <Acd_posid?> {1 TO 9999}}
```

```
[<Form?> {BRIEF,
          FULL}},
LEN <Site?> STRING
<Frame?> {0 TO 2047}
<Bay?> {0 TO 1}
<Drawer?> {0 TO 19}
<Card?> {0 TO 32}
[<Form?> {BRIEF,
          FULL}},
DN <dir_no?> STRING
[<Form?> {BRIEF,
          FULL}},
CLLI <cli?> STRING
<num?> {0 TO 9999}
[<Form?> {BRIEF,
          FULL}}}
```

Parameter definitions

Table 3-51 AGTPOS Parameter Definitions

PARAMETER	VALUE	DEFINITION
HOW	ALL, GROUP, POSID, LEN, DN, CLLI	This is parameter identifies a unique ACD position or group of positions.
Form	BRIEF, FULL	This value indicates whether to use the brief or full form of the output. Call Forcing Tone only appears and is removed from the Full aspect of this subcommand.

Responses

N/A

Notes

AGTPOS will show datafill based on table assignment in Tables ACDLOGIN or ACDENLOG. This datafill may be overridden on the physical phone by ACD Group datafill.

In Releases CNA04 - CNA06 Table KSETLINE is still available for datafilling FORCING. If Forcing Datafill for a given position is drawn from KSETLINE, Tone Destination will be listed as "DEFAULT." Note also that datafill in table ACDLOGIN or ACDENLOG will override KSETLINE datafill for both ACDSHOW and in actual operation.

Examples

Normal Example: Datafill from Table ACDLOGIN or ACDENLOG

```
ACDSHOW>>
```

```
>agtpos posid 1009 full
```

```
-----
--
Agent Position ID:      1009
** Agent Not Logged In **
Agent :                LEN HOST 00 0 01 26   DN 6217701   KEY  1
ACD Group:             ACDPSAPMDC
ACD Subgroup:          0
SCAI Agent:            NO
Call Forcing:          HSET          (New)
```

CNA04 -CNA06 Example: Datafill from Table KSETLINE Only

```
ACDSHOW>>
```

```
>agtpos posid 1009 full
```

```
-----
--
```

Agent Position ID: 1010

** Agent Not Logged In **

Agent : LEN HOST 00 0 01 26 DN 6217701 KEY 1

ACD Group: ACDPSAPMDC

ACD Subgroup: 0

SCAI Agent: NO

Call Forcing: Default (New)

Alarms

Alarm name:

N/A

AG3293mm.ab10

This feature adds support for ATC trunks with the AIN 0.1 application. The TRAVER MM for ATC trunks will be modified to show the AIN option, trigger groups, and possible triggering information. Complete details on how TRAVER is supported for public inter-toll trunks is included in "AR0449 AIN SSP TRAVER" .

Examples

PODP trigger: ISUP ATC TRUNK

>traver tr isupicittatc 6707227512 b

WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE

BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO

DOCUMENTATION.

TABLE TRKGRP

ISUPICITTATC ATC 0 NPDGP NCRT IC NIL MIDL EAP4 NSCR 613 ITT Y EAPLAN N
COMB N \$

TABLE STDPRTCT

EAP4 (1) (65021) 0

. SUBTABLE STDPRT

. KEY NOT FOUND

. DEFAULT VALUE IS: N NP 0 NA

. SUBTABLE AMAPRT

. KEY NOT FOUND

. DEFAULT VALUE IS: NONE OVRNONE N

TABLE HNPACONT

613 984 1 (268) (1) (84) (0) 0

. SUBTABLE HNPACODE

. 670 671 HNPA 0

. 722 722 NPOSDN 613 722

TABLE OFCVAR

AIN_OFFICE_TRIGGRP OFCTRIGGRP_ALL

AIN Info Collected TDP: no subscribed trigger.

TABLE TRIGGRP

OFCTRIGGRP_ALL INFOANAL

. N11 (DG N11DIG)\$ NIL

Trigger R01 N11 is applicable to office.

. PODP (DG PODPDIG)\$ NIL

Trigger R01 PODP is applicable to office.

. PODP (DG ATCPODP)\$ NIL

Trigger R01 PODP is applicable to office.

```
. . TABLE TRIGDIG
. . ATCPODP PODP 6707227512 PODP EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE C7GTT
. . . AINJAZZ 6707227512 6707227512 SSNONLY (AINTTEST) $
```

AIN Info Analyzed TDP: trigger criteria met, querying the database.

Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Analyzed TDP: trigger criteria met, querying the database.

Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

PODP Trigger: MF ATC trunk

> traver tr mfatcic1 6136213811 b

WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE

BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO

DOCUMENTATION.

TABLE TRKGRP

MFATCIC1 ATC 0 NPDGP NCRT IC NIL MIDL EAP4 NSCR 613 ITT Y EAPLAN N
COMB N \$

TABLE STDPRTCT

EAP4 (1) (65021) 0

. SUBTABLE STDPRT

. KEY NOT FOUND

. DEFAULT VALUE IS: N NP 0 NA

. SUBTABLE AMAPRT

. KEY NOT FOUND

. DEFAULT VALUE IS: NONE OVRNONE N

TABLE HNPACONT

613 984 1 (268) (1) (84) (0) 0

. SUBTABLE HNPACODE

. 613 613 HNPA 0

. 621 621 DN 613 621

TABLE OFCVAR

AIN_OFFICE_TRIGGRP OFCTRIGGRP_ALL

AIN Info Collected TDP: no subscribed trigger.

TABLE TRIGGRP

OFCTRIGGRP_ALL INFOANAL

. N11 (DG N11DIG)\$ NIL

Trigger R01 N11 is applicable to office.

. PODP (DG PODPDIG)\$ NIL

Trigger R01 PODP is applicable to office.

. PODP (DG ATCPODP)\$ NIL

Trigger R01 PODP is applicable to office.

. . TABLE TRIGDIG

. . ATCPODP PODP 6136213811 PODP EVENT TCAP R01 SS7 AINJAZZ DFLT \$

. . . TABLE C7GTTYPE

. . . AINJAZZ ANSI7 3 \$

. . . TABLE C7GTT

. . . AINJAZZ 6136213811 6136213811 SSNONLY (AINTTEST) \$

AIN Info Analyzed TDP: trigger criteria met, querying the database.

Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Analyzed TDP: trigger criteria met, querying the database.

Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AFR Trigger Subscribed on Trunk Group Basis: ISUP ATC Trunk

>traver tr isupicittatc 6707227111 ainchg 0000000000 b

WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE

BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO

DOCUMENTATION.

TABLE TRKGRP

ISUPICITTATC ATC 0 NPDGP NCRT IC NIL MIDL EAP4 NSCR 613 ITT Y EAPLAN N
COMB N \$

TABLE STDPRTCT

EAP4 (1) (65021) 0

. SUBTABLE STDPRT

. 670 670 T DD 0 OFRT 500 3 3 NONE

. . TRKAIN

. . ISUPICITTATC OFCTRIGGRP_ALL

TABLE OFCVAR

AIN_OFFICE_TRIGGRP OFCTRIGGRP_ALL

AIN Info Collected TDP: no subscribed trigger.

TABLE TRIGGRP

OFCTRIGGRP_ALL INFOANAL

. N11 (DG N11DIG)\$ NIL

Trigger R01 N11 is NOT applicable to individual POTS trunk.

. PODP (DG PODPDIG)\$ NIL

Trigger R01 PODP is NOT applicable to individual POTS trunk.

. PODP (DG ATCPODP)\$ NIL

Trigger R01 PODP is NOT applicable to individual POTS trunk.

TABLE TRIGGRP

OFCTRIGGRP_ALL INFOANAL

. N11 (DG N11DIG)\$ NIL

Trigger R01 N11 is applicable to office.

. PODP (DG PODPDIG)\$ NIL

Trigger R01 PODP is applicable to office.

. PODP (DG ATCPODP)\$ NIL

Trigger R01 PODP is applicable to office.

AIN Info Analyzed TDP: trigger criteria not met.

. . TABLE OFRT

. . 500 S D AIN_BUZY_TRK

. . AFR JAZZINFO

TABLE TRIGGRP

. AFR \$ NIL

Trigger R01 AFR is applicable to individual POTS trunk.

. . TABLE TRIGINFO

. . JAZZINFO EVENT TCAP R01 SS7 AINJAZZ DFLT \$

```
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE C7GTT
. . . AINJAZZ 0000000000 0000000000 SSNONLY (AINTTEST) $
AIN Network Busy TDP: trigger criteria met,
querying the database if network is busy.
. . EXIT TABLE OFRT
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
+++ TRAVER: SUCCESSFUL CALL TRACE +++
AIN Network Busy TDP: trigger criteria met,
querying the database if network is busy.
DIGIT TRANSLATION ROUTES
1 AIN_BUZY_TRK      6707227111      ST
TREATMENT ROUTES. TREATMENT IS: GNCT
1 T120
```

References

AR0449 AIN SSP TRAVER

AG3820mm.aa06

Directories

PROGDIR

Table of new/modified directories
Table 3-52 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
PROGDIR	CHANGED		BOTH	RES
DLOGDIR	NEW		BOTH	RES

Accessing directory:**To access**

DLOG

To return to CI

QUIT

Commands**Table of New/modified commands****Table 3-53 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
LOGFORMAT	CHANGED		PROGDIR
DLOG	NEW		PROGDIR

Command name: LOGFORMAT**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

The LOGFORMAT command takes a log file containing raw data generated by the DLOG DIRP subsystem and formats it into a user-readable log file. The functionality of this command is not changed. However, upon issuance of this command, a new message is printed to the user:

WARNING: This command is being phased out.

A new formatting utility is available upon entering the new command level: DLOG. Answer Y or YES to continue executing the LOGFORMAT command, N or NO to quit out of LOGFORMAT.

Please confirm ("YES", "Y", "NO", or "N"):

Warning

No new warnings apply. Refer to DDOC AG1004 MM section for previous warnings.

Command syntax

Parms: <Input Filename> FILE name

<Output Options> {ToFile <File Name> STRING

<Device Name> DEVICE name,

ToTerminal}

[<Starting Block> {0 TO 4294967295}]

Parameter definitions

No parameters have changed for this command, please refer to DDOC AG1004 MM section for the explanation of the parameters.

Command name: DLOG**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

This feature provides a new user interface to the log formatting utility. This interface is in the form of a new Command Interpreter (CI) level called DLOG. Inside this new level, the user has the ability to set up formatting parameters through the use of the DLOG subcommands. These subcommands are: INCLUDEALL, EXCLUDEALL, INCLUDE <log_id>, EXCLUDE <log_id>, FORMAT with a starttime and endtime, FORMATFILE <filename>, LISTFILES and STATUS (For details of the syntax of these subcommands, refer to the MM section of this document). For example, it is now possible for the user to capture only PM logs that were generated Friday, April 8 from 10:00 AM to 11:30 AM. The formatting process begins upon entering the FORMAT subcommand.

Warnings

Only one user is allowed to format logs at one time, therefore, only one user is allowed in the DLOG command level at one time. If another user attempts to enter the DLOG level, this warning is printed to the user's terminal:

The DLOG utility is already in use by user: <username>. This user is currently: [NOT] FORMATTING.

If the user has invoked the FORMAT command, the message reports the user as FORMATTING. If the user is in the DLOG level, but has not invoked the FORMAT command or the FORMAT process has completed, the message reports the user as NOT FORMATTING.

Command syntax

<STATUS

EXCLUDEALL

INCLUDEALL

EXCLUDE <logname1 [reportnum1] [reportnum2]> [<logname2
[reportnum1] [reportnum]> ... <lognamen* [repnumn]>]

INCLUDE <logname1 [reportnum1] [reportnum2]> [<logname2
[reportnum1] [reportnum]> ... <lognamen* [repnumn]>]

FORMAT<starttime> <endtime>

<Output Options> {ToFile <Device Name> DEVICE name,
ToTerminal}

FORMATFILE <filename>

<Output Options> {ToFile <Device Name> DEVICE name,
ToTerminal}

[<starting block> {0 to 4294967295}]

LISTFILES

QUIT>

* The number of log_ids entered with one invocation of the INCLUDE or EXCLUDE subcommand is governed by the Command Interpreter. The limit is 108 characters per one line at the CI prompt. This limitation will vary the number of log_ids allowed depending on what log_ids are used (i.e. how many characters per log_id entered). However, the INCLUDE and EXCLUDE subcommands can be entered multiple times, each time adding to the list of log_ids to include or exclude.

*Lognames and reportnums are entered as with the ADDREP and DELREP subcommands in LOGUTIL. For example: PM 180 181 199 CM DIRP 101

Command Text Descriptions

DLOG: Gets you into the DLOG level. Upon entering this level the default format setting is ALL logs included and no logs excluded. The following are subcommands available to the user after entering this level:

STATUS: This subcommand displays the current DLOG format parameters (i.e. logs INCLUDED/EXCLUDED). Also displayed is the earliest valid starttime available for use with the FORMAT subcommand and information on the previous use of DLOG.

EXCLUDEALL: This subcommand removes all logs from the current set of logs to be formatted. This subcommand must be followed by the INCLUDE subcommand or no formatting of logs will take place.

INCLUDEALL: This subcommand resets the current set of logs to be formatted to ALL which is the default value.

EXCLUDE: This subcommand removes logs from the current set of logs to be formatted. If the logs were not included in the first place, this subcommand does nothing. The logs are validated upon entering this subcommand.

INCLUDE: This subcommand appends logs to the current set of logs to be formatted. If the logs are already included, this subcommand does nothing. The logs are validated upon entering this subcommand.

FORMAT: This subcommand executes the actual formatting process. The following parameters are part of this subcommand in the listed order:

- **<STARTTIME> and <ENDTIME>:** These parameters allow the user to specify the time window for which logs are to be formatted. Both parameters are required. The syntax is YYMMDDHHMMSS.
- **<OUTPUT OPTIONS>:** This parameter is required and only has two valid values:
 - **ToFile:** If this keyword is specified, the user is required to enter an outputdevice where the final formatted file is to be stored.
 - **ToTerminal:** If this keyword is specified, the output will be displayed to the user's screen.

FORMATFILE: This subcommand allows the user to format raw DLOG data by specifying a specific filename. This is the current functionality of the LOGFORMAT CI command.

- **<FILENAME>:** This is a required parameter and is validated to be an unformatted DLOG file.
- **<OUTPUT OPTIONS>:** This parameter is required and only has two valid values:
 - **ToFile:** If this keyword is specified, the user is required to enter an outputdevice where the final formatted file is to be stored.
 - **ToTerminal:** If this keyword is specified, the output will be displayed to the user's screen.
- **<starting block> {0 to 4294967295}:** This is an optional parameter if the user knows what specific block number to start the formatting from instead of starting from the beginning block.
- **LISTFILES:** This subcommand displays the raw DLOG files with their starttimes and endtimes to the user. These are the files recorded in the internal DLOG table that is used with the FORMAT subcommand starttimes and endtimes to locate the appropriate files to format.
- **QUIT:** This subcommand exits the DLOG level.

An example of how the set of logs to be formatted is manipulated with the commands entered is as follows:

COMMANDS:SET of LOGS:

DLOGALL logs

EXCLUDEALLno logs

INCLUDE net pm sosnet, pm, sos

INCLUDE ssr topsnet, pm, sos, ssr, tops

EXCLUDE pm 180net, pm (except pm180), sos,
ssr, tops

EXCLUDE sos linenet, pm (except pm180), ssr,
tops

INCLUDEALLALL logs

INCLUDE pmALL logs

The final file created from the format process has the name DLOG+date/
time stamp of the current time and includes a header inside the file which
echoes the parameters used in the format. For example: file
DLOG940517111523 may have a header of

DLOG utility run by: TEAM12

DLOG formatted filename: DLOG940825233132

File was stored on volume: S01DTEMP

Starttime was: 940825215630

Endtime was: 940825215930

All logs are INCLUDED

Parameter definitions

Table 3-54 DLOG Parameter Definitions

PARAMETER	VALUE	DEFINITION
log_id	log name or log name number number (i.e. NET or NET 101 100)	This is a valid log name for this office, i.e. must be accessible through LOGUTIL. Multiple log_ids must be separated by spaces. If a specific log number is to be entered, the number(s) must follow the name separated by spaces. For example, NET 101 TOPS 102 110 PM. This parameter is required (at least one log_id) if the INCLUDE or EXCLUDE subcommand is entered.
Output Options	ToFile ToTerminal	If ToFile specified, the user is required to enter an outputdevice. If Toterminal, the display comes to the user's terminal.
filename	A valid unformatted DLOG file	This parameter is required with the FORMATFILE subcommand. This is a file located on the DLOG DIRP volume that is unformatted that the user wishes to be formatted. (i.e. P890104130001DLOG)
starting block	number from 0 to 4294967295	This is the block number in the unformatted file where the user wishes the formatting to start. This is an optional parameter to be used only with the FORMATFILE subcommand.
starttime	yymmddhhmms s	This parameter together with endtime is required if the FORMAT subcommand is entered. This is the starttime of the date/time stamp range in which to format logs.
endtime	yymmddhhmms s	This parameter together with starttime is required if the FORMAT subcommand is entered. This is the endtime of the date/time stamp range in which to format logs.
outputdevice	DDU volume name, SLM volume name or SFDEV	This parameter is optional with either the FORMAT or FORMATFILE subcommands, the default being the user's TERMINAL. This is the volume on which the user wishes the final formatted file to be stored.

Responses

Response 1

One new response is added to the LOGFORMAT command with this feature upon entering the LOGFORMAT command:

WARNING: This command is being phased out.

A new formatting utility is available upon entering the new command level: DLOG. Answer Y or YES to continue executing the LOGFORMAT command, N or NO to quit out of LOGFORMAT:

Please confirm (“YES”, “Y”, “NO”, or “N”):

Explanation:

The reason for the addition of this message is to inform the user of the new utility for formatting DLOG raw data. It also gives the user a chance to cancel the request and try the new utility.

System action:

If Y or Yes is entered by the user, the system proceeds with the formatting process as it worked in the past.

If N or No is entered by the user, the formatting process is stopped and the CI prompt is returned to the user.

User action:

Enter Y, YES, N, or NO.

Response 2

All other responses are the same responses from the LOGFORMAT process (DDOC AG1004 MM section) which are repeated here for readability.

Logformat in progress.....

WARNING: Formatting logs generated before a restart or before datafill changes can result in misleading formatting traps and the death of your terminal session.

Explanation:

All file header checks (software release number, switch identifier and unformatted log file pattern) have passed or user has previously specified that he wishes to bypass them when prompted. Misleading logs can occur because some logs attempt to capture information at log formatting time rather than at log generation time, and this information may no longer be present after a restart. Steps are being taken to reduce the number of log reports that do this, but the potential for fatal formatting traps and misleading logs at the present time still exist.

System action:

Self-explanatory

User action:

Not Applicable

Response 3

FORMAT command aborted due to insufficient system resources.

Explanation:

System does not have enough resources to allocate needed pools/mailboxes.

System action:

The FORMAT command is aborted.

User action:

This message is indicative of a very serious system problem. Contact FSE/ETAS.

Response 4

The input file contains incorrect record length. Verify that it is an unformatted log file.

Explanation:

The input file does not contain the correct record length (presently fixed length at 2048 bytes)

System action:

The FORMAT command is aborted.

User action:

The user has probably attempted to format a file that is not an unformatted log file. If this is not the case, then the file has probably been seriously corrupted and cannot be formatted.

Response 5

Input file is NOT an unformatted log file.

Explanation:

The input file provided does not have a fixed length format which all unformatted log files have.

System action:

The FORMAT command is aborted.

User action:

User should make sure that the input file is an unformatted DIRP log file.

Response 6

Header indicates that input file is NOT an unformatted DIRP log file.

Explanation:

The header of an unformatted log file has a special pattern that input file specified does not contain.

System action:

The FORMAT command is aborted.

User action:

User should make sure that the input file is an unformatted DIRP log file.

Response 7

WARNING: Header indicates that input file was generated in a different software release. Formatting traps are likely to result and some logs may be incorrect.

Do you wish to continue?

Please confirm (“Y”, ”YES”, ”N” or “NO”):

Explanation:

When the DIRP DLOG subsystem uses a file to record unformatted logs, it first records the software release in its header. This software release number does not correspond to the release that is in the switch as indicated by the value of BCS_NUMBER in table OFCSTD.

System action:

The FORMAT command lets the user continue if user wishes.

User action:

If the user is willing to accept the possibility of formatting traps (albeit harmless) and potentially misleading logs, then the user should continue.

Response 8

WARNING: Header indicates that input file was generated on a different switch (XXXXXXXXXX). Formatting traps are likely to result and some logs may be incorrect. Do you wish to continue?

Please confirm (“Y”, “YES”, “N” or “NO”):

Explanation:

When the DIRP DLOG subsystem uses a file to record unformatted logs, it first records the switch identifier (CLLI) in its header. This CLLI does not correspond to the CLLI presently in the switch. If the length of the CLLI name contained in the log file exceeds the maximum length allowed, corruption is assumed, and a single blank will be listed as the different switch.

System action:

The FORMAT command lets the user continue if user wishes.

User action:

If the user is willing to accept the possibility of formatting traps (albeit harmless) and potentially misleading logs, then the user can continue. These potential formatting traps and misleading logs can be the result of different configurations across switches.

Response 9

Could not get volume information for input device.

Explanation:

Self-explanatory.

System action:

The FORMAT command is aborted.

User action:

Check if input device is working. Check if input device is in service.

Response 10

Input file not on a readable device.

Explanation:

Self-explanatory.

System action:

The FORMAT command is aborted.

User action:

Check volume specified.

Response 11

Output device specified cannot be written to.

Explanation:

Output device may be read only.

System action:

The FORMAT command is aborted.

User action:

Check the volume specified.

Response 12

Could not get file information for input file.

Explanation:

Self-explanatory.

System action:

The FORMAT command is aborted.

User action:

Check volume specified.

Response 13

The input file does not contain any blocks.

Explanation:

Self-explanatory.

System action:

The FORMAT command is aborted.

User action:

File specified is empty.

Response 14

The input file contains XXXX block(s) and a header.

Explanation:

The header contains the software release number and switch identifier and a special pattern indicating that it is an unformatted DIRP DLOG file.

System action:

This is just an information message, the FORMAT command continues.

User action:

Not Applicable.

Response 15

Could not create new file to output formatted logs.

Explanation:

Self-explanatory.

System action:

The FORMAT command is aborted.

User action:

Check system-generated reason for why output file could not be created.

Response 16

Processed block XXXX.

Explanation:

The FORMAT command has reached the XXXXth block. This message will only be output when a DLOG file is being formatted to a file and will not appear when it is being formatted to a terminal. At present, this message is output every 5th block.

System action:

Not Applicable.

User action:

Not Applicable.

Response 17

Formatting complete.

Explanation:

Self-explanatory.

System action:

Not Applicable.

User action:

Not Applicable.

Response 18

Formatting halted at block #XXXX

Explanation:

A file system error has occurred and the format has been aborted. The block number indicates where formatting was occurring before the error.

System action:

The FORMAT command is aborted.

User action:

The user may wish to continue formatting by issuing the FORMAT command using as a starting block the block where formatting halted or the block right after that.

Response 19

Starttime is adjusted to earliest valid starttime.

Earliest valid starttime for FORMAT subcommand: 940824175336

Explanation:

The user entered a starttime earlier than the earliest valid starttime known by DLOG.

System action:

The system updates the starttime to the earliest valid starttime (as displayed) and continues the FORMAT subcommand execution.

User action:

None.

Response 20

File to be searched is: P940824174501DLOG

File contains 17 blocks

Total number of blocks to be searched is: 17

Explanation:

When DLOG find the file or files to be searched for the desired logs to be formatted, it displays the filename and number of blocks in the file to the user. If more than one file is displayed, the TOTAL number of blocks would reflect the addition of the blocks in both files.

System action:

The FORMAT execution continues.

User action:

None

Response 21

Formatting completed.

Final formatted filename: DLOG940824184552

Explanation:

When the user formats logs to a file, upon completion of the format, this message is displayed. It informs the user of the Final formatted filename.

System action:

The FORMAT execution has completed.

User action:

None

Response 22

File: P940824174501DLOG From: 940824175336

To: 940824175516

File: P940824184108DLOG From: 940824184038

To: 940824184356

File: P940824184509DLOG From: 940824184502

To: 940824184958

Explanation:

The user has entered the LISTFILES subcommand. This is the display of files with their starttimes and endtimes.

System action:

None

User action:

None

Response 23

All logs are EXCLUDED

**Please use INCLUDE or INCLUDEALL in order to execute the
FORMAT subcommand**

Explanation:

The user has entered the EXCLUDEALL subcommand. This is the display informing the user that an INCLUDE or INCLUDEALL will have to be done before formatting can take place.

System action:

None

User action:

None

Response 24

1 report(s) included

Explanation:

The user has entered INCLUDE PM 180.

System action:

None

User action:

None

Response 25

EXCLUDE PM logs with the exception of: 180

Earliest valid starttime for FORMAT subcommand: 940824175336

Last DLOG utility user that formatted logs: TEAM4

Last DLOG file name: DLOG940824184801

Last DLOG file stored on: User Terminal

Explanation:

The user then entered STATUS. It shows that the only included log is the PM 180 and the previous use information.

System action:

None.

User action:

None

Response 26

The DLOG utility is already in use by user: TEAM4

This user is currently: NOT FORMATTING

Explanation:

A user has attempted to enter the DLOG level while another user was in the level already.

System action:

None

User action:

None

Response 27

No files found using that starttime and endtime

Explanation:

The system was unable to locate a file or files with the specified starttime and endtime.

System action:

None

User action:

If a LISTFILES indicated that the file or files exists for that time range, than the error should be reported.

Response 28

Could not write header in final file

Explanation:

The volume where the final file has been created has run out of store space and DLOG is unable to even write the header information into the file.

System action:

None

User action:

Clean up volume where the file is to be stored or use another volume.

Response 29

Already in DLOG Utility

Explanation:

The user has typed DLOG while already in the DLOG level.

System action:

None

User action:

None

Response 30

First parameter must be a LOG - flushing ...

0 report(s) included

Explanation:

The user has attempted to enter an invalid log with the INCLUDE subcommand. This message is also displayed if a log was invalid with the EXCLUDE subcommand except “0 report(s) included” would be “0 report(s) excluded”.

System action:

None

User action:

None

Response 31

REPORT PM 888 NOT FOUND

Explanation:

An attempt was made to enter an invalid report number for the valid PM logname.

System action:

None

User action:

None

Response 32

Problem allocating store for INCLUDE/EXCLUDE tables

INCLUDES and EXCLUDES may not be accurate.

Number of tables not allocated: 6

Explanation:

The INCLUDE and EXCLUDE subcommands are based on temporary tables being allocated in temp store. This message is displayed if any number of the tables (one for each valid log) which failed to be allocated.

System action:

A swerr is also generated. Temp store must be VERY low!! This is a serious problem.

User action:

Report problem, capture SWER.

Response 33

Could not get file info from fid from internal table

Table corrupted. Please use FORMATFILE subcommand.

Explanation:

An error has occurred that corrupted the raw DLOG files table which is used by the FORMAT subcommand.

System action:

The FORMAT subcommand is aborted.

User action:

Use the FORMATFILE subcommand or try again later.

Notes

Not Applicable

Examples**LOGFORMAT examples**

```
> logformat p890110030004dlog tofile testcase sfdev
```

WARNING: This command is being phased out.

A new formatting utility is available upon entering the new command level: DLOG. Answer Y or YES to continue executing the LOGFORMAT command, N or NO to quit out of LOGFORMAT.

Do you wish to continue?

Please confirm ("YES", "Y", "NO", or "N"):

```
> Y
```

The input file contains 3 block(s) and a header.

Logformat in progress.....

WARNING: Formatting logs generated before a restart or before datafill changes can result in misleading formatting traps and the death of your terminal session.

Formatting completed.

Please refer to DDOC AG1004 MM section for other examples of the LOGFORMAT command.

DLOG examples

> Help DLOG

DLOG is the interface for the Disk LOG formatting utility.

Only one user is allowed in this level at a time.

The following subcommands are available:

STATUS :Displays logs INCLUDED/EXCLUDED, earliest valid
starttime and previous use information

EXCLUDEALL :Removes all logs from set of logs to format

INCLUDEALL :Resets the set of logs to format to all logs

EXCLUDE :Accepts logs to EXCLUDE from format executed by
FORMAT subcommand

INCLUDE :Accepts logs to INCLUDE in format executed by FORMAT
subcommand

FORMAT :Accepts parameters for date/time range to format

FORMATFILE :Accepts filename of unformatted DLOG file to format

LISTFILES :Displays the raw DLOG files recorded in the internal
table with their starttimes and endtimes

QUIT :Exits DLOG level

>DLOG

> EXCLUDE PM 180

> STATUS

INCLUDE PM logs with the exception of: 180

Earliest valid starttime for FORMAT subcommand: 940824175336

Last DLOG utility user that formatted logs: TEAM12

Last DLOG file name: DLOG940826015026

Last DLOG file stored on: S01DTEMP

>DLOG

The DLOG utility is already in use by user: VMAP1.

This user is currently: FORMATTING.

>DLOG

>EXCLUDE NET LINE TRK

>INCLUDE NET 101

>FORMAT 940510132300 940510134600 ToFile s01dscratch

File to be searched is: P940510100000DLOG

File contains 17 blocks

Total number of blocks to be searched is: 17

Logformat in progress.....

WARNING: Formatting logs generated before a restart or before datafill changes can result in misleading formatting traps and the death of your terminal session.

Processed block number 5.

Processed block number 10.

Processed block number 15.

Formatting completed.

Final formatted filename: DLOG940510152235

>DISKUT

>LF s01dscratch

File information for volume S01SCRATCH:

{NOTE: 1 BLOCK = 512 BYTES }

LAST FILE O R I O FILE NUM OF MAX FILE NAME

MODIFY CODE R E T P SIZE RECORDS REC

DATE G C O E IN IN LEN

C N BLOCKS FILE

940524 0 I F 9624 4812 2048 DLOG940524112436

> DLOG

> INCLUDE SOS

ALL Logs are INCLUDED

> STATUS

All logs are INCLUDED

Earliest valid starttime for FORMAT subcommand: 940824175336

Last DLOG utility user that formatted logs: TEAM12

Last DLOG file name: DLOG940826015026

Last DLOG file stored on: S01DTEMP

> EXCLUDEALL

All logs are EXCLUDED

Please use INCLUDE or INCLUDEALL in order to execute the

FORMAT subcommand

> FORMAT 940516174400

ENTER <endtime> {<yymmddhhmmss>}

> 940516183000 ToTerminal

All logs are EXCLUDED

Please use INCLUDE or INCLUDEALL in order to execute the

FORMAT subcommand

> INCLUDE SOS

> FORMAT 940516174400 940516183000 ToTerminal

Logformat in progress.....

WARNING: Formatting logs generated before a restart or before datafill changes can result in misleading formatting traps and the death of your terminal session.

***** DLOG Formatted logs are printed to user's TERMINAL since no outputdevice was given.*****

Formatting completed.

Alarms

Alarm name:

Not Applicable.

Conditions required to raise the alarm

Not Applicable.

Duration of the alarm

Not Applicable.

AG3821mm.aa05**Directories****Table of new/modified directories****Table 3-55 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
ENETSYSDIR	CHANGED		SUPERNODE	RES
SYSDIR	CHANGED		SUPERNODE	RES

Accessing the ENETSYSDIR directory:**To access**

To enter the ENETSYSDIR directory from the CI environment when the ENET is active, enter

MAPCI;MTC;NET;SYSTEM

To enter the ENETSYSDIR directory from the CI environment when the ENET is not active, enter

MAPCI;MTC;MTCNA;ENET;SYSTEM

To return to CI

To exit the ENETSYSDIR directory and return to the CI environment, enter

QUIT ALL

Commands

Table of New/modified commands

Table 3-56 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
RTS, TST	CHANGED		ENETSYSDIR
TABLE (ENINV: ADD)	CHANGED		SYSDIR

Command name: RTS, TST

Command type

MENU

Command target

SUPERNODE

Command availability

RES

Warning

Not applicable

Command syntax

RTS, TST:
 Parms: <Plane> {0 TO 1}
 <Shelf> {0 TO 7,
 ALL}
 [<Options> ...{FORCE,
 NOPROMPT,
 NOWAIT}]

Parameter definitions

See “Command Syntax”

Command name: TABLE (ENINV: ADD)**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Warning

Not applicable

Command syntax**TABLE ENINV: ADD**

Parms: <ENKEY> {0 TO 7}
 <EN_CLASS> {PRI,EXT,PRI64K,PRI16K}
 <FRTYPE> {ENC,SCC}
 <RNO> {0 TO 511}
 <FRPEC> {NT9X05AB,NT9X01MB}
 <SHPEC> {NT9X0801,NT9X0810}
 <MSCARD0> {1 TO 26}
 <MSLINK0> {0 TO 3}
 <MSPORT0> {0 TO 127}
 <FLOOR0> {0 TO 99}
 <ROW0> {A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R,S,T,U,V,W,X,
 Y,Z,AA,BB,CC,DD,EE,FF,GG,HH,II,JK,LL,MM,
 NN,PP,QQ,RR,SS,TT,UU,VV,WW,XX,YY,ZZ}
 <FRPOS0 > {0 TO 99}
 <SHELF0> {0,00,13,26,39}
 <LOAD0> {alphanumeric}
 <MSCARD1> {1 TO 26}
 <MSLINK> {0 TO 3}
 <MSPORT1> {0 TO 127}
 <FLOOR1 > {0 TO 99}
 <ROW1> {A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R,S,T,U,V,W,X,
 Y,Z,AA,BB,CC,DD,EE,FF,GG,HH,II,JK,LL,MM,
 NN,PP,QQ,RR,SS,TT,UU,VV,WW,XX,YY,ZZ}
 <FRPOS1> {0 TO 99}
 <SHELF1> {0,00,13,26,39}
 <LOAD1> {alphanumeric}

Parameter definitions

See “Command Syntax”

Responses: TST, RTS

TST Response

Request to <test_type> ENET Plane:<pl> Shelf:<sh> submitted.
Request to <test_type> ENET Plane:<pl> Shelf:<sh> <status>.
<test_results>.

The following is a list of variables used within the MAP display.

<test_type>INSV TEST, OOSN TEST, OOSD TEST
<pl> The plane of the ENET that the report was generated for (0-1).
<sh> The shelf of the ENET that the report was generated for (0-3).
<status> successful, failed, aborted, rejected
<test_results> The failed test’s name and any additional information displayed

Example (TST Passes):

Request to INSV TEST ENET Plane:1 Shelf:0 submitted.
Request to INSV TEST ENET Plane:1 Shelf:0 successful.

Example (TST Single Fault):

Request to INSV TEST ENET Plane:1 Shelf:0 submitted.
Request to INSV TEST ENET Plane:1 Shelf:0 failed.
Failure: In-Service test fail. Incorrect ENCLASS in table ENINV

Example (TST Double Fault):

Request to OOSN TEST ENET Plane:1 Shelf:0 submitted.
Request to OOSN TEST ENET Plane:1 Shelf:0 failed.
Failure: OOSN test fail. Interrupt Handler
Incorrect ENCLASS in table ENINV

Site	Flr	RPos	Bay_id	Shf	Description	Slot	EqPEC
HOST	01	A00	ENC 0 0	00	ENET:0:00	07	9X13FA FRNT

RTS Response

Request to RTS ENET Plane:<pl> Shelf:<sh> submitted.
Request to RTS ENET Plane:<pl> Shelf:<sh> <status>.
<test_results>

The following is a list of variables used within the MAP display.

<pl> The plane of the ENET that the report was generated for (0-1).
<sh> The shelf of the ENET that the report was generated for (0-3).

-Initial office:

If the load is datafilled at NT, then request NT to send a new datafilled load with the correct data. Otherwise follow the above instructions.

-Retrofit:

The retrofit process will have to be backed up to the point of datafilling field ENCLASS in table ENINV so field ENCLASS can be corrected. For more information on retrofit, refer to ENET Retrofit Feature Document AL1618.

Response: TABLE (ENINV: ADD)**Responses**

1. Warning: You have datafilled field: ENCLASS as PRI.
Verify that you have a 128K ENET Shelf.
2. Warning: You have datafilled field: ENCLASS as PRI16K.
Verify that you have a 16K ENET Shelf.
3. Warning: You have datafilled field: ENCLASS as PRI64K.
Verify that you have a 64K ENET Shelf.

Explanation:

When the first ENET node is datafilled in table ENINV, a message is displayed at the MAP terminal requesting that the user verify the value datafilled in field ENCLASS with the ENET hardware. Although field ENCLASS is verified at RTS time, we do this extra check to detect any errors as early as possible.

System action:

none

User action:

none

Notes

none

Examples

-none

Alarms**Alarm name:**

- no changes to alarms

Conditions required to raise the alarm**Duration of the alarm****AG3880mm.aa05****Directories**

Not applicable

Table of new/modified directories**Table 3-57 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:**To access****To return to CI****Commands**

Not applicable

Table of New/modified commands**Table 3-58 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:

Command type

Command target

Command availability

Command description

Warning

Command syntax

Parameter definitions

Table 3-59 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Response

Explanation:

System action:

User action:

Notes

Examples

Alarms

Alarm name: CkEr

Circuit Error alarm is under MAP IOD alarm Banner.

Conditions required to raise the alarm

The following conditions must all be met:

- No other higher priority IOD alarm co-exist. Otherwise CkEr alarm will be overridden. (eg. AMA, CkOs, OM, JF, TTRF ...etc)

- At least 1 IOD circuit device is either Babbling or Disconnected. If Disconnected, that circuit's corresponding tuple in table TERMDEV must have the field CKERDISC = Y. If Babbling, CKERDISC will have no control over the CkEr alarm.
- The alarm causing device must be in service in order to observe CkEr alarm. If the device is manual or system busied, CkOs alarm will override CkEr alarm.

Duration of the alarm

The alarm will last until one of the following:

- All circuits causing the alarm are rectified.
- If the alarm is caused by a Disconnected device, the error circuit's corresponding entry in table TERMDEV is datafilled with CKERDISC = N. (Note a Babbling device will cause the CkEr alarm regardless of the CKERDISC field.)
- Another higher priority IOD alarm overrides CkEr alarm.
- All circuits causing the alarm are manual busied or offlined.

AG4047mm.aa06

Directories

Table of new/modified directories

Table 3-60 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Table of New/modified commands

Table 3-61 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
loadfw	changed		ttp

Command name: loadfw

Command type

NON-MENU

Command target

Both

Command availability

RES

Command description

Load the firmware to MTU, DTU or EDTU circuits. The command is modified for 4 channel EDTU firmware downloading.

Warning

Non service affecting.

Command syntax

LOADFW : DOWNLOAD FIRMWARE TO THE POSTED EDTU TRUNK

Parms: [<OPTION> {CC [<FILENAME> STRING]

[QUERY}}]

Parameter definitions

Table 3-62 LOADFW Parameter Definitions

PARAMETER	VALUE	DEFINITION
OPTION	CC or Query	Loading from CC or query the firmware
FILENAME	STRING	the name of the firmware load

Responses**Response 1**

NO ACTION: NOWAIT cannot be used in loading EDTU.

Explanation:

Nowait is not allowed in loading EDTU because the 4 EDTU cricuits have to be remain seized during firware loading.

System action:

Loading will not be started.

User action:

Take out NOWAIT from the command line.

Response 2

NO ACTION: ANOTHER EDTU IS LOADING.

Explanation:

Only 1 EDTU is allowed to load at any given time.

System action:

Loading will not be started.

User action:

Wait until the loading is finished before starting another one.

Response 3

NO ACTION: Other Ckt is not in the hold position.

Explanation:

One of the 4 EDTU circuits is not in the hold position.

System action:

Loading will not be started.

User action:

Make sure all 4 EDTU circuits are in the hold position.

Response 4

NO ACTION: Other Ckt is not Seized by this User

Explanation:

One of the 4 EDTU circuits is not seized by this MAP.

System action:

Loading will not be started.

User action:

Make sure all 4 EDTU circuits are seized by this MAP.

Response 5

NO ACTION: 1st ckt of the 4 ckts should be datafilled on even slot

Explanation:

EDTU occupy two slots on MTM, and it has to start on the even number slot, Each slot has two circuits. Therefore, the first circuit of the four circuits in a EDTU should be on 0, 4, 8 12 etc. circuit of the MTM.

System action

Loading will not be started.

User action:

Datafilled the EDTU card starting from the even number slot.

Response 6

NO ACTION: Incorrect ckt seized in the hold position

Explanation:

Incorrect circuit is seized in the hold poistion. (For example, the posted and the 3 hold circuits do not belong to one EDTU).

System action:

Loading will not be started.

User action:

Identify any required user action. Provide the user as many courses of action as possible.

Make sure the correct circuits are in the hold position.

Response 7

NO ACTION: Mate Ckt(s) is not on the same MTM

Explanation:

The circuit(s) in the hold position is not on the same MTM as the posted one.

System action:

Loading will not be started.

User action:

Make sure the correct circuit(s) are seized and in the hold position.

Response 8

NO ACTION: EDTU loading in progress

Explanation:

Cannot query firmware when another EDTU is loading..

System action:

Query firmware will not be started.

User action:

Wait until this EDTU loading is finished.

Notes

Examples

LOADFW CC EDTUAA01 - loading the terminal with EDTUAA01 file.

LOADFW CC - loading the terminal with the default file name taken from the EDTULDFILE paramater in the table OFCVAR.

Alarms

Alarm name:

N/A

Conditions required to raise the alarm**Duration of the alarm****AG4163mm.aa06****Directories**

N/A

Table of new/modified directories**Table 3-63 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

N/A

Accessing directory:

N/A

To access

N/A

To return to CI**Commands**

This feature will have a direct impact on the output displayed by the TRAVER and SOC CI commands. However, there is no impact or changes required to the command syntax of either one of these commands.

We will only discuss the ASSIGN command of SOC CI since it will display warning messages that this feature directly generates. The SELECT, DBAUDIT and Debug subcommands will not be discussed since we don't have any direct dealings with. Please refer to AR1299MM.AA09 for full details of the SOC MMI. We will only outline the parts we affect in this section.

Table of New/modified commands**Table 3-64 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
ASSIGN	UNCHANGED		SOC DIR
TRAVER	UNCHANGED		CI

Command name: ASSIGN**Command type: NON-MENU****Command target: SUPERNODE, BRISC****Command availability: RES****Command description**

This command is a SOC Utility command that is used to grant rights to use a SOC option or change a SOC option state (enable or disable). The user must have the right-to-use for that SOC option.

Since this feature is not responsible for the creation of the SOC command set please refer to SOC User Manual (NTP 297-8991-901) for complete details of the command. We will only discuss the key aspect of the command's usage that should be highlighted to the customer, and that is the warning messages generated when performing an ASSIGN command.

Warning

When using the ASSIGN command to assign an option from the ON to the IDLE state, each feature that is part of the option will output a message that warns the user of the possible impacts that the transition might have.

Please refer to section “ Examples” on page 172 for the warning messages of each AIN option.

Command syntax

N/A

Parameter definitions

Table 3-65 ASSIGN Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

N/A

Response

N/A

Explanation:

System action:

User action:

Notes

N/A

Examples

AIN Essentials Option

Request is:

>assign state idle to ain00002

Response is:

This transition will disable all AIN, VPN, and INAP Services.

Confirm state change of option AIN00002 to state IDLE by entering the textual option name:

>essentials

DONE.

AIN Call Management Option

Request is:

>assign state idle to ain00006

Response is:

This transition will disable AIN R0.1 Triggers for all current and future ain subscribers.

Confirm state change of option AIN00006 to state IDLE by entering the textual option name:

>call management

DONE.

Default Routing Option

Request is:

>assign state idle to ain00010

Response is:

This transition will disable Default Routing for all current and future ain subscribers.

Confirm state change of option AIN00010 to state IDLE

by entering the textual option name:

>default routing

DONE.Command name: TRAVER

We will be affecting the AIN query database message portion of the TRAVER output. The 'query database message' remains unchanged, the 'not query database message' will be changed to reflect which AIN option is stopping the query (because the option is in the IDLE state).

The command and its syntax will not be discussed within this document, please refer to section "1.2.9 Examples" on page 53 for some detailed examples. Command type: NON-MENU

Command target: SUPERNODE

Command availability: RES

Command description

TRAVER (TRANslation VERification) is a low level diagnostic tool that simulates a call from a user specified origination to a user specified destination. TRAVER examines and displays translation and routing data for a single call leg and verifies the translation table.

Warning

N/A

Command syntax

N/A

Parameter definitions

Table 3-66 SUPERNODE Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

There are three different "not querying datafill" messages, one for each of the AIN00002 and AIN00006 options. The AIN00010 option does not affect TRAVER.

Response, AIN00002 Option.

AIN TDP: trigger criteria met,

NOT querying the database, AIN00002 SOC Option is IDLE.

Explanation:

System action:

User action:

Response, AIN00006 Option.

AIN TDP: trigger criteria met,

NOT querying the database, AIN00006 SOC Option is IDLE.

Explanation:

System action:

User action:

Error response for both AIN00002 and AIN00006

When the Option can not be determined, the option name is replaced by the string "AN UNDETERMINED AIN".

When the state of the option can not be determined the output will be "UNSURE of Database <option code> SOC Option is in Unpredictable state. CHECK SOC"

Thus, if we can not determined the name of the option and its state, then the output message in tracer would look like:

"UNSURE of Database Query, AN UNDETERMINED AIN SOC Option is in Unpredictable state. CHECK SOC"

Notes

N/A

Examples

AIN Essentials Option

Figure 3-13Not query database output of AIN00002 Option

```

traver 1 6214414 6211061 t
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL NIL 00 N $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
REM1 00 0 08 03 S AIN AIN OFFHKIMM
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
TABLE TRIGGRP
OFFHKIMM ORIGATT
. OFFHKIMM $ PAULINFO
Trigger R01 OFFHKIMM is applicable to individual POTS line.
. . TABLE TRIGINFO
. . PAULINFO EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE LENFEAT
. . . TUPLE NOT FOUND
. . . TABLE C7GTT
. . . AINJAZZ 6136214414 6136214414 SSNONLY (AINTST) $
AIN Orig Attempt TDP: trigger criteria met,
NOT querying the database, AIN00002 SOC Option is IDLE.

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

```

AIN Call Management Option

Figure 3-14 Not query database output of AIN00006 Option

```

traver I 6214414 6211061 t
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL NIL 00 N $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE LENFEAT
REM1 00 0 08 03 S AIN AIN OFFHKIMM
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
TABLE TRIGGRP
OFFHKIMM ORIGATT
. OFFHKIMM $ PAULINFO
Trigger R01 OFFHKIMM is applicable to individual POTS line.
. . TABLE TRIGINFO
. . PAULINFO EVENT TCAP R01 SS7 AINJAZZ DFLT $
. . . TABLE C7GTTYPE
. . . AINJAZZ ANSI7 3 $
. . . TABLE LENFEAT
. . . TUPLE NOT FOUND
. . . TABLE C7GTT
. . . AINJAZZ 6136214414 6136214414 SSNONLY (AINTTEST) $
AIN Orig Attempt TDP: trigger criteria met,
NOT querying the database, AIN00006 SOC Option is IDLE.

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

```

Default Routing Option

N/A, Default Routing does not affect TRAVER.

Alarms

N/A

Alarm name:

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AN0754mm.aa07**Directories****Table of new/modified directories****Table 3-67 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:**To access****To return to CI****Commands****Table of New/modified commands****Table 3-68 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
NAG	NEW		PROGDIR

Command name: NAG**Command type**

NON-MENU

Command target

SuperNode

Command availabilityRES

Command description

The NAG command is a CI command which allows Node Assessment information to be displayed to the screen. All of the nodes that have out of service conditions (i.e. in service trouble, manbusy, system busy or a rex condition) will be displayed. There are more options available with the parameters OFF, ON and ALL.

The command NAG OFF will not display the Node Assessment information, but will turn the NAG400 log off. The database that keeps track of the number of times a particular node has been reported in the log will be deleted.

The command NAG ON will not display the Node Assessment information, but will turn the NAG400 log on. If the NAG400 log was previously on, then a message will be displayed informing that the NAG400 log is already on. If the NAG400 log was off, a new database that keeps track of the number of times a particular node has been reported will be re-created and at 4 minutes after the hour the NAG400 log will be reported.

The command NAG ALL will display the nag information plus the nodes that are off-line.

Warning

When turning the NAG400 log off, the user will be prompted to ensure that is what the user wants. When turning NAG400 off, the internal database is cleared, so when the log is turned back on, the count that indicates how many past reports the nodes has been in an out of state condition will be re-initialized to one.

Command syntax

NAG {OFF, ON, ALL}

Parameter definitions

Table 3-69 NAG Parameter Definitions

PARAMETER	VALUE	DEFINITION
OFF	OFF	Optional parameter to turn the NAG400 log off.
ON	ON	Optional parameter to turn the NAG400 log on.
ALL	ALL	Optional parameter to have the displayed nodes included.

Responses

Response 1

```

Front End Load:  FSL37AF
Level   Node      Status REX INFO          Unit 0 Unit 1
-----
      CPU      0      ACT
CM      NORMAL
MS      NORMAL
IOD MTD      4      SYSB      ----      --      --
      MPC      4      SYSB      ----      --      --
NET      NORMAL
PM LCM ERCM 00 0 SYSB      ----      SYSB      SYSB
      NIU      0      SYSB      FAILED      MANB      MANB
      RMM      1      CBSY      ----      --      --
      ESA      0      CBSY      ----      ISTB      MANB
      LGC      0      ISTB      ATP      .      ISTB
      LTC      0      ISTB      ATP      ISTB      ISTB
      LTC      1      ISTB      ATP      ISTB      ISTB
      DTC      0      ISTB      FAILED      .      .
      DTC      1      ISTB      ATP      ISTB      ISTB
      SMR      0      ISTB      ATP      ISTB      ISTB
      SMS      0      ISTB      ATP      ISTB      .
      SMU      0      ISTB      ATP      ISTB      ISTB
      TMS      0      ISTB      ATP      .      .
      SMA      0      ISTB      ATP      ISTB      ISTB
      LTC      2      ISTB      ATP      .      .
      DTC      2      ISTB      ATP      ISTB      ISTB
      MSB7     0      ISTB      ATP      .      ISTB
      RCC      0      ISTB      FAILED      .      ISTB
      RCS ERCS 00 0 ISTB      ----      --      --
      SMSR     0      ISTB      NO_REX_RUN  ISTB      ISTB
      LIM      0      .      FAILED      .      .
Offline Node Count: 1
-----

```

Explanation:

This is the report that is displayed when the NAG command is issued. The report includes the software load and which CPU is active. The nodes are ordered first by level. CM is the first level, then MS, IOD, NET and PM. If the level does not have any nodes with reportable conditions then NORMAL is displayed. Within the level the nodes are sorted by their status. SYSB is first, then CBSY, ISTB, MANB and then REX problems. The nodes with the same status are not sorted in any priority, it is simply how the system picks it up when looping through the node numbers. At the bottom of the report the offline node count is displayed.

System action:

Cycle through the levels and find out of service nodes and print in priority of their status or rex issue.

User action:

If the user would like to see the offline nodes, enter NAG ALL.

Response 2

Nag will include offline nodes.

Front End Load: FSL37AF

Level	Node	Status	REX	INFO	Unit 0	Unit 1

	CPU	0		ACT		
CM				NORMAL		
MS				NORMAL		
IOD	MTD	4		SYSB	----	-- --
	MPC	4		SYSB	----	-- --
NET				NORMAL		
PM	LCM	ERCM 00 0		SYSB	----	SYSB SYSB
	NIU	0		SYSB	FAILED	MANB MANB
	RMM	1		CBSY	----	-- --
	ESA	0		CBSY	----	ISTB MANB
	LGC	0		ISTB	ATP	. ISTB
	LTC	0		ISTB	ATP	ISTB ISTB
	LTC	1		ISTB	ATP	ISTB ISTB
	DTC	0		ISTB	FAILED	. .
	DTC	1		ISTB	ATP	ISTB ISTB
	SMR	0		ISTB	ATP	ISTB ISTB
	LDT	PSAP 14 0		ISTB	----	ISTB .
	SMU	0		ISTB	ATP	ISTB ISTB
	TMS	0		ISTB	ATP	. .
	SMA	0		ISTB	ATP	ISTB ISTB
	LTC	2		ISTB	ATP	. .
	DTC	2		ISTB	ATP	ISTB ISTB

MSB7	0	ISTB	ATP	.	ISTB
RCC	0	ISTB	FAILED	.	ISTB
RCS	ERCS 00 0	ISTB	----	--	--
SMSR	0	ISTB	FAILED	ISTB	ISTB
LDT	1	OFFL	----	OFFL	OFFL

Explanation:

This is the report that is displayed when the NAG ALL command is issued. The only difference between the NAG and NAG ALL commands are that the NAG ALL command includes the offline nodes in the report. The size of the report is limited by the number of nodes in the office. This could be a very large report.

Notice that the LDT does not have the long descriptive name like the LDT that is ISTB. This is a limitation of NAG ALL. The RCU, RCS, and LDT with long external names will be represented by their internal number when the node is in the OFFL state only.

Response 3

Then hourly NAG400 log is already on.

Explanation:

When the user enters NAG ON at the command line and the NAG400 log is currently on no action is taken, but a message is displayed.

Response 4

Then hourly NAG400 log is already off.

Explanation:

When the user enter NAG OFF at the command line and the NAG400 log is currently off, no action is taken.

Response 5

The hourly NAG400 log has been turned ON.
It will be generated at 4 minutes passed every hour.

Explanation:

This is the response when the nag on command is issued and NAG400 was previously off.

System action:

The system re-initializes the internal database and the count displayed on the first log will be one. The count represents the number of times that the node associated with it has had, consecutively, the conditions reportable for the NAG400 log.

Response 6

The NAG database will be deleted.

Do you still want to turn the log off?

Please confirm ("YES", "Y", "NO", or "N"):

>yes

The hourly nag log has been turned OFF.

Explanation:

This is the response with nag off is entered when the log is currently on. If no is entered at the prompt. There is no response and the log will not be turned off.

System action:

The internal database is deleted.

Notes**Examples**

AN0777mm.aa05**Directories**

Not Applicable

Table of new/modified directories**Table 3-70 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:**To access****To return to CI****Commands**

TRAVER, QCM, WCM

Table of New/modified commands**Table 3-71 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	CHANGED		
QCM	CHANGED		
WCM	CHANGED		

Command name: TRAVER**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAVER.. TRAnslation VERification tool used to display the path of the specified call through translation tables.

Currently, the TRAVER command supports a maximum dialed digit count of 24. Trying to insert more than 24 will yield the error message INVALID DIGITS IN CALLED DR. This activity changes the maximum from 24 to 30. Also, TRAVER currently does not display more than 24 digits to outpulse. This activity changes the maximum from 24 to 30.

Warning

No Change

Command syntax

No Change

Parameter definitions

Table 3-72 TRAVER Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Response 1

Explanation:

System action:

User action:

Notes

Examples

Before this activity, the following TRAVER example produced an error message because the dialed digit count is greater than 24.

>traver l 6215955 1010111011421234567890123 b

INVALID DIGITS IN CALLED DR

This activity supports a dialed digit count of up to 30 as the same TRAVER example shows below.

```

>traver l 6215955 1010111011421234567890123 b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC LATA1 0
NIL NIL 00 Y RESGRP 0 2 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P621 ( 1) ( 0) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 1010111 1010111 EA DD 7 P P111 CAR1 Y OFRT 889 8 25 Y
. . TABLE OFRT
. . 889 CND EA INTNL SK 3
. .   S D OGEACAR1
. .   S D ISUP2WCAR1
. .   CND ALWAYS SK 2
. .   N D OGEACAR1 15 D121 N
. .   N D ISUP2WCAR1 15 D121 N
. . EXIT TABLE OFRT
. TABLE STDPRTCT
. P111 ( 1) ( 0) 0
. . SUBTABLE STDPRTWARNING: CHANGES IN TABLE STDPRT MAY ALTER
OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. . 011 011 EA DD 3 T IN CAR1 N
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE CCTR
42 T 042 7 15 T OFRT 887 Y
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
TABLE OFRT
887 CND EA INTNL SK 2
   S D LNTOPS
   CND ALWAYS SK 1
   N D LNTOPS 0 1 N
EXIT TABLE OFRT
OVERLAP CARRIER SELECTION (OCS) APPLIES
TABLE OCCINFO
CAR1 0111 TRANS Y Y Y Y N N N Y Y Y Y LONG 14 FGRPD Y N Y N N
N N N Y N N N
TABLE EASAC

```

```

TUPLE NOT FOUND
Using Equal Access (EA) route  OFRT  889 from Pretranslation
TABLE OFRT
889 CND EA INTNL SK 3
  S D OGEACAR1
  S D ISUP2WCAR1
  CND ALWAYS SK 2
  N D OGEACAR1 15 D121 N
  N D ISUP2WCAR1 15 D121 N
EXIT TABLE OFRT
+++ TRAVER: SUCCESSFUL CALL TRACE +++

```

DIGIT TRANSLATION ROUTES

```

  1 OGEACAR1      D121      ST
2 ISUP2WCAR1     D121      ST

```

TREATMENT ROUTES. TREATMENT IS: GNCT

```
1 T120
```

```
+++ TRAVER: SUCCESSFUL CALL TRACE +++
```

Command name: QCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Query Call Memory (QCM) CI command displays the contents of the Call memory associated with a RES line. The QCM CI command is enhanced by this activity to display up to a 30 digit number for the Outgoing Call Memory (OCM) field “Called DN”. Presently, the QCM command displays up to a 24 digit number for OCM field “Called DN”.

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Response**Explanation:****System action:****User action:****Notes**

None

Examples

An example of the QCM output is provided below. In this example, 25 dialed digits are stored in the OCM (reflected by field "Called DN").

> QCM 6211234 F

CALL MEMORY DISPLAY FOR DN: 6211234 LEN: HOST 01 1 02 21

Incoming Call Memory -

Time of call: 1994/01/01 00:00:00.000 THU.

Calling DN: UNAVAILABLE

Network:

Originating Address Type: (UNKNOWN)

Interworking Encountered: NO

Originating DN PRI: UNSUPPRESSED

Originating Name PRI: UNSUPPRESSED

Long Distance Call: NO

Intraoffice call: YES

Group Intercom: NO

Call Waiting: NO

Display: ALLOWED

COT Already Activated: NO

Outgoing Call Memory -

Called DN: 1010999011431234567890123

Prefix Count: 10

DN Unusable: YES
Intraoffice call: NO
Destination DN PRI: UNSUPPRESSED
Destination Name PRI: UNSUPPRESSED
Call Forwarded: NO
Group Intercom: NO
CNDB Features: CNDB_NOT_ACTIVE
CNAB FEATURES: CNAB_NOT_ACTIVE
Name/DN Block Features: NAME_DN_BLK_FEATS_NOT_ACTIVE
Display: ALLOWED

Command name: WCM**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Write Call Memory (WCM) CI command is used to write data into the Call Memory for a RES line. The WCM CI command is enhanced by this activity to write up to a 30 digit number into the Outgoing Call Memory (OCM) field "Called DN". Presently, the WCM CI command can write up to a 24 digit number into OCM field "Called DN".

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Response

Explanation:

System action:

User action:

Notes

None

Examples

An example using the WCM CI command to write a 25 digit number into field “Called DN” of the OCM is shown below.

```
>wcm
<Directory Number> or <Line Equipment Number>:
>6210048
Timestamp 12mSec units (1=SetCurrent): 0
>
Clg agent (U, D, L, C, T_ICMB): U
>
NETWORK      :
>
Originating line type: 0
>
Orig DN PRI   : N
>
Orig Name PRI : N
>
Long Distance : N
>
Interworking  : N
>
Intraoffice   : Y
>
Group Intercom : N
>
Call Waiting  : N
>
Disp Disallowed: N
>
Cld agent (U, D, L, C): D
>
```



```

Cld agent DIGITS:
>10109990114441234567890123
Prefix Count : 0
>DN Unreliable : N
>
Intraoffice : Y

>
Dest Dn PRI : N
>
Dest Name PRI : N
>
Call Forwarded : N
>
Group Intercom : N
>
CNDB Features : CNDB_NOT_ACTIVE
>
CNAB Features : CNAB_NOT_ACTIVE
>
NAME/DN Block Features : NAME_DN_BLK_FEATS_NOT_ACTIVE
>
Disp Disallowed: N
>
ICMB UPDATED
OCMB UPDATED
-----
END WCM

```

Alarms

Not Applicable

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN0846mm.ab04

Directories

This section describes a new message that may be seen at the MAP while processing Data Modification Orders.

Table of new/modified directories**Table 3-73 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
TABDIR	N/A	N/A	SUPERNODE	RES

Accessing directory: TABDIR**To access**

TABLE <table name>

To return to CI

QUIT

Commands**Table of New/modified commands****Table 3-74 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
ADD	CHANGED	N/A	TABDIR
CHANGE	CHANGED	N/A	TABDIR

Command name:

- a. ADD
- b. CHANGE

Command type

- c. ADD NON-MENU
- d. CHANGE NON-MENU

Command target

- e. ADD SUPERNODE
- f. CHANGE SUPERNODE

Command availability

- g. ADD RES
- h. CHANGE RES

Command description

The ADD and CHANGE commands are used to update the data tables in the CM. When some data tables are updated they verify the new data using data from other CM tables. Based on the data found in other tables, the data attempting to be added may be rejected. This activity introduces new possibilities for such failures.

Warning

Not Applicable

Command syntax

The syntax for these commands has **not** been changed.

The ADD and CHANGE commands become available when the TABLE command is initiated from the MAP. The ADD command adds the given tuple to the table. The CHANGE command changes a field, or fields, in the current tuple.

EXAMPLE:

```
> TABLE LTCINV
> ADD <field 1> <field 2>...<field n>

> CHANGE [<field name> | <field number> [<field value>]]
```

Parameter definitions

Parameters for the ADD and CHANGE commands have **not** changed.

Table 3-75ADD/CHANGE Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Error:The new node cannot be supported on <PMNAME>
ACTION: <possible actions>

Explanation:

This response indicates that the update has been rejected. The data was not accepted because the new node requires more resources, such as ports, on the host peripheral than are currently available.

System action:

None.

User action:

There is a possibility of several actions displayed at the MAP:

- BSY and RTS the XPM to defragment the Port and Terminal tables
- None, resources have been exceeded on this XPM

If the message 'BSY and RTS the XPM to defragment the Port and Terminal tables' is displayed, the system has determined that cleaning up the Port and Terminal tables will free the required resources for the new node. This may become necessary if numerous dynamic additions and deletions were performed on the XPM, causing the tables in the XPM to become severely fragmented.

If the resources in the XPM are simply required by existing nodes, making it impossible to support the new node, then an action of 'None, resources have been exceeded on this XPM' is displayed. This means that defragmenting the Port and Terminal tables will not free the required resources.

Notes

Currently this error may be seen when adding data in the following tables:

- RCCINV
- LTCRINV
- MSBINV
- LCMINV
- RMMINV
- RCUINV
- RCSINV
- RCTINV
- LDTINV
- ESAINV

- IPMLINV
- STINV
- DCHINV

Examples

Error: The new node cannot be supported on LTC 0
 Action: BSY and RTS the XPM to defragment the
 Port and/or Terminal tables

Error: The new node cannot be supported on LGC 0
 Action: None, Port and/or Terminal resources have
 been exceeded on this XPM

Alarms

Not Applicable.

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN0934mm.ab20

Feature AN0934: SMA(Subscriber Carrier Module 100 Access) RDT
 (Remote Digital Terminal) Line Maintenance Robustness

Directories

None

Table of new/modified directories

Table 3-76 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

None

Accessing directory:

None

To access

None

To return to CI

None

Commands

All line maintenance commands that allocate a p-side channel will be affected by this feature.

Table of New/modified commands**Table 3-77 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

None

Command name:

None

Command type

None

Command target

Supernode

Command availability

The available commands will only affect POTS/COIN and EBS lines.

Command description

None

Warning

None

Command syntax

None

Parameter definitions

Table 3-78 Parameter Definitions

PARAMETER	VALUE	DEFINITION

None

Responses

One of three responses will be displayed at the map:

No SCM Pside Channel Check PM

Response

No SCM Pside Channel Check PM

Explanation:

The message, “No SCM Pside Channel Check PM”, is displayed when an attempt to query a channel for a p-side channel fails. This message will be displayed if a p-side cannot be allocated.

System action:

The system will check the RDT to verify if a p-side channel can be accessed for a test. If a p-side channel is already being used then a message will be sent to the SMA verifying that a p-side is not available.

User action:

The only course of action that can be taken by the user is to attempt to allocate a p-side channel again. There is a possibility that the p-side channel might be accessible during another attempt.

Notes

None

Examples

None

Alarms

None

Alarm name:

None

Conditions required to raise the alarm

None

Duration of the alarm

None

AN1059mm.ab08

Directories

N/A

Table of new/modified directories

Table 3-79 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

Table of New/modified commands

Table 3-80 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUERYPM	Changed	N/A	IDTDIR

Command name: QUERYPM

Command type: MENU

Command target: Supernode

Command availability: resident

Command description

The command queries information about the IDT being posted.

The phrase 'SMA name' in the system response is replaced by 'Cside XPM Name' since this IDT may be defined off either SMA or SMA2 peripherals.

Warning

N/A

Command syntax

QueryPM: Query information about the IDT

Parms: [<OPTION> {FLT}]

Parameter definitions

Table 3-81 QUERYPM Parameter Definitions

PARAMETER	VALUE	DEFINITION
OPTION	FLT	N/A

Responses

The variable fields in the following system response are underlined.

The changed part of the response is shown in the italic font.

Response

PM Type: IDT PM No: 0 Int. No: 2 Node No: 38

Prot-Switch: Unavailable

*** PPS NOT ENABLED ***

Cside XPM Name: SMA2 0

RDT Name: RDT1 00 0

Network element: 35 Unnamed

Explanation:

The meaning and range of the valuable fields are not changed by this feature.

PM Noexternal IDT PM number as defined in the appropriate tuple in table RDTINV.

Int. Nointernal IDT number assigned to IDT by the system.

Node Noindex assigned to the IDT when it is added to the internal system node table.

Prot-Switchavailability of protection switching as defined in RDTINV.

Cside XPM Namethe name of the host XPM for this IDT

RDT Namethe name of the RDT which this IDT is assigned to

Network elementid of the network element as defined in RDTINV.

System action:

None

User action:

None

Notes

N/A

Examples

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
CM Flt	SysB	ITOC	.	1LCME	.	.	3 GC	.	.
M	M	*C*		*C*				*C*	
IDT				SysB	ManB	OffL	CBsy	ISTb	InSv
0 Quit		PM		1	2	13	1	2	5
2 Post_		IDT		0	0	4	0	1	2
3 Listset									
4		IDT 0	ISTb		Links_00S:	1			
5 Trnsl									
6		QueryPM							
7 Bsy		PM Type: IDT	PM No: 0	Int. No: 2	Node No: 38				
8 RTS		Prot-Switch: Unavailable							
9 OffL		*** PPS NOT ENABLED ***							
10		Cside XPM Name: SMA2 0							
11 Disp_		RDT Name: RDT1 00 0							
12 Next		Network element:	35	Unnamed					
13									
14 QueryPM									
15 RDTalarm									
16 PPS_									
17 Cont_									
18 LoopBk_									
YUR									
Time 10:10									>

Alarms

Alarm name: N/A

Conditions required to raise the alarm

Duration of the alarm

AN1134mm.ab01**Use of the Software Optionality Control (SOC) Interface**

ETMS OC is an optional feature. This will be achieved by the use of the SOC utility. This feature will be delivered in the IDLE state and will be able to be set to the ON state by the SOC utility. For more information on the interface for the SOC utility refer to the MM section for feature AR1094, Software Optionality Control Phase 1.

The two SOC's defined by this feature are described below.

SOC For ETMS OC**Purpose**

When the SOC state of ETMS OC is IDLE, the RTS command in the OCDL level will be disabled. This way, no ETMS OC links can be brought into service

Activation

To turn on this feature the customer must first have the Right To Use (RTU) this feature. To see the RTU and STATE of all features, from MAP terminal type:

> SOC (This puts you in the SOC MAP increment)

> SELECT ALL (This prints information on all optional features)

If the RTU is N, then it is not possible to enable this feature. To change the RTU to Y, type:

> ASSIGN RTU <password> TO <order code>

The order code for the ETMS OC SOC is ENSV0008.

Once the customer has the RTU set to Y, the state of the feature can be turned on by the following command.

> ASSIGN STATE ON TO ENV0008

The use of ETMS OC is now activated.

Deactivation

To deactivate (change to the IDLE state) the ETMS OC SOC, the customer must again have the RTU set to Y. To change the state of the SOC for this feature to IDLE (the OFF state is not supported by SOC yet), type:

> ASSIGN STATE IDLE TO ENSV0008

It must be remembered that when turning this feature idle, all TMSOCDL links must be ManB or OffL. If they are not, the state change from ON to IDLE will fail and a failure message will be printed to the screen. The ETMS Increased Remotes Support SOC must also be in the IDLE state for this transition to occur.

SOC For ETMS Increased Remote Support

Purpose

There is an optional feature within ETMS OC that also can be turned on and off by the SOC utility. This feature has the capability of expanding the number of nodes in an OC network to 31. This feature can only be turned on if the ETMS OC feature's SOC state is ON.

Activation

To activate this feature the customer must have the RTU set to Y as previously explained. Once in the SOC MAP level type:

> ASSIGN STATE ON TO <order code>

The order code for the SOC For 31 Nodes in an OC Network is ENSV0011.

This will change the SOC state of this feature to ON. The ETMS SOC must be turned ON before this SOC can be turned ON.

Deactivation

To deactivate (IDLE state) this feature the customer must type:

> ASSIGN STATE IDLE TO ENSV0011

This will disallow the use of greater than 15 nodes in an OC Network. If there are more than 15 data links defined in table TMSOCDL they must be ManB or OffL. If this is not the case, an error message is produced and the transition will fail.

Directories

Table of new/modified directories

Table 3-82 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
OCDLDIR	NEW		*See Note	RES

*Note:The OCDLDIR directory is maintained on all CM platforms.

Accessing directory: OCDLDIR

To access

Whenever the OCDL command is entered from the TMS MAP level, the OCDL MAP level is accessed. The OCDL command is menu option 16 at the TMS MAP level. The OCDLDIR directory is added to the symbol table when this command is invoked. The commands used to access this directory from the CI environment are as follows:

>mapci;mtc;pm;post tms #;ocdl
(# represents the number of the TMS which is to be posted.)

If the user attempts to enter the OCDL level from a TMS not configured as OC, the following warning is given:

TMS not configured as OC in table LTCINV.

Figure 1 shows the OCDL command as menu option 16 at the TMS MAP level.

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	.	.	.	.	.	.	.	.	.
TMS				SysB	ManB	OffL	CBsy	ISTb	InSv
0	Quit	PM		0	0	0	0	0	60
2	Post_	TMS		0	0	0	0	0	2
3	ListSet								
4		TMS	0 InSv	Links_00S:	CSide	0, PSide	0		
5	Trnsl_	Unit0:	Act	InSv					
6	Tst_	Unit1:	Inact	InSv					
7	Bsy_	PM:							
8	RTS_	POST:							
9	OffL_								
10	LoadPM_								
11	Disp_								
12	Next								
13	SwAct								
14	QueryPM								
15	DCH								
16	OCDL								
17	PERFORM								
18	ISG								
TIME 15:31 >									

Figure 3-15TMS MAP Level Menu

To return to CI

To return from this directory to the CI environment, the QUIT command must be issued from the command line of the OCDL MAP level with one of two possible parameters.

- The first is:>quit all
- The other is:>quit mapci

Commands

Table of New/modified commands

Table 3-83 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUIT	New for OCDL		OCDLDIR
BSY	New for OCDL		OCDLDIR
RTS	New for OCDL		OCDLDIR
OFFL	New for OCDL		OCDLDIR
CONT	New for OCDL		OCDLDIR
LOOPBK	New for OCDL		OCDLDIR
OCPING	New for OCDL		OCDLDIR
QOCDL	New for OCDL		OCDLDIR
QCHOM	New for OCDL		OCDLDIR

The commands QUIT, BSY, RTS, OFFL, CONT, and LOOPBK currently exist in other PM levels of the MAP. For this reason not all of the possible responses to these commands are listed in the following sections. Only the most common responses to these commands are given. They are only listed as new to the OCDL level because the OCDL level is new. The last three commands are new to the system and unique to the ETMS OCDL level.

The following figure depicts the MAP display of the new OCDL level and the commands which are available from that menu.

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL	
.	.	.	.	.	.	.	.	.	.	
OCDL					SysB	ManB	OffL	CBsy	ISTb	InSv
0	Quit	PM			0	0	0	0	0	60
2		TMS			0	0	0	0	0	2
3										
4		TMS	0 InSv	Links_00S: CSide 0, PSide 0						
5		Unit0:	Act	InSv						
6		Unit1:	Inact	InSv						
7	Bsy_									
8	RTS_	OCDL			1111111111	2222222222	33			
9	OffL_				0123456789	0123456789	0123456789	01		
10							-----	--		
11										
12										
13										
14										
15	Cont_									
16	Loopbk_									
17	OCPing_									
18	QOCDL									
TIME 15:31 >										

Figure 3-16 OCDL MAP Level Menu

In addition to the commands shown in the above figure, this feature also provides the non-menu (hidden) command, QCHOM. The following pages give detailed descriptions of all OCDL MAP level commands.

Note that the terms OC data link (OCDL) and channel are synonymous and used interchangeably in this document. Physically, an OCDL is an EISP channel. However from the application perspective, the channels are used as OC data links.

Command name: QUIT**Command type**

QUIT is a menu command.

Command target

The command target for the QUIT command includes all CM platforms.

Command availability

The QUIT command is resident (RES) in the load.

Command description

The QUIT command is used to exit from the OCDL MAP level and to return to a previous level.

Warning

No warnings are generated by QUIT command.

Command syntax

Whenever a user requests help on the QUIT command from the OCDL command line, the help panel displays the following information:

Parameter is: <n levels | incname | ALL>

Parameter definitions

Table 3-84 QUIT Parameters

PARAMETER	VALUE	DEFINITION
<n levels>	<number>	Specifies the number of MAP levels to quit.
<incname>	PM,MTC,MAPCI	Specifies that the user wants to leave the named level.
<ALL>	ALL	Specifies that the user wants to quit all MAP levels and return to the CI level.

Responses: QUIT

When the QUIT command is issued from the OCDL MAP level, several responses are possible. The potential responses are describes as follows:

Response 1

The system replaces the OCDL MAP level with a different level.

Explanation:

The QUIT command was entered.

System action:

Control is returned to the level specified by the user.

User action:

No user action is required in response to the return of control to the different level.

Response 2

QUIT -- Unable to quit requested number of levels
Last parameter evaluated was: 1

Explanation:

The QUIT command has failed. An invalid level number was entered for the *n* variable parameter. The number entered exceeds that number of MAP levels from which to quit.

System action:

Control remains at the OCDL MAP level.

User action:

The user should re-enter the command using the appropriate level number.

Command name: BSY**Command type**

BSY is a menu command.

Command target

The command target for the BSY command includes all CM platforms.

Command availability

The BSY command is resident (RES) in the load.

Command description

The BSY command, which is valid on an OC data link that is OffL, InSv, CBsy or SysB, busies a specified channel which removes it from service.

Warning

A warning is given when the OC data link is to be busied from the inservice state. In the case of issuing the BSY command with the ALL parameter, the following warning is issued once. By busying the link, all calls in progress under this link's control will be dropped as a result. The following warning is displayed at the MAP and a confirmation is requested.

Operator services may be affected.
Do you wish to continue?
Please confirm ("YES," "Y," "NO," or "N"):

If confirmation of the warning is negative, the BSY action is not performed. If confirmation is positive, the BSY action is performed and a message is displayed indicating the result.

When busying an OffL, SysB, or CBsy channel, a confirmation request is not necessary since no inservice calls will be affected.

Command syntax

Whenever a user requests help on the BSY command from the OCDL command line, the help panel displays the following information:

BSY:Busy the channel
Parms:<CHNL>...{0 TO 31}
[<ALL> {ALL}]

Parameter definitions**Table 3-85 BSY Parameters**

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies which channel (OCDL) is to be busied.
<ALL>	ALL	Specifies that all channels (OCDL) are to be busied.

Responses: BSY

When the BSY command is entered, several replies are possible.

Response 1

Channel <number> Bsy Passed

Explanation:

The BSY command was successful.

System action:

The specified channel is busied and an 'M' is placed under the corresponding label at the MAP display.

User action:

No user action is required in response to the BSY action.

Response 2

Request Invalid: Channel <number> is <current state>

Explanation:

The BSY command has been issued on a channel that is not in the proper state.

System action:

The specified channel is not busied.

User action:

Ensure that the channel is in the proper state before entering the BSY command again.

Response 3

No response from PM.

Explanation:

The CM is unable to communicate with the ETMS peripheral.

System action:

The system marks the OC data link as ManB.

User action:

Execute command again or investigate trouble.

Command name: RTS**Command type**

RTS is a menu command.

Command target

The command target for the RTS command includes all CM platforms.

Command availability

The RTS command is resident (RES) in the load.

Command description

The RTS command, which is only valid on a ManB channel, returns a specified channel to service.

Warning

No warnings are generated by the RTS command.

Command syntax

Whenever a user requests help on the RTS command from the OCDL command line, the help panel displays the following information:

RTS:Return a specified channel to service
Parms:<CHNL>...{0 TO 31}
[<ALL> {ALL}]

Parameter definitions

Table 3-86 RTS Parameters

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies which channel (OCDL) is to be returned to service.
<ALL>	ALL	Specifies that all channels (OCDL) are to be returned to service.

Responses: RTS

When the RTS command is entered, several replies are possible.

Response 1

Channel <number> RTS Passed

Explanation:

The RTS command was successful.

System action:

The specified channel is returned to service and a '.' is placed under the corresponding label at the MAP display.

User action:

No user action is required in response to the RTS action.

Response 2

RTS Failed: <reason>

Explanation:

The RTS action has failed. The <reason> for the failure could be one of the following.

- Failed to open the channel
- Bad message received from PM
- Fail message received from PM
- No response from PM
- DS-1 not in service
- A loopback is set on this channel
- The ETMS OC SOC is not ON

System action:

The specified link is not RTSed.

User action:

Determine the reason for failure. Correct the problem and then reissue the RTS command.

Response 3

Request Invalid: Channel <number> is <current state>

Explanation:

The RTS command has been issued on a channel that is not manual busy.

System action:

The specified channel is not returned to service.

User action:

Ensure that the channel is in the proper state before attempting the RTS again.

Command name: OFFL**Command type**

OFFL is a menu command.

Command target

The command target for the OFFL command includes all CM platforms.

Command availability

The OFFL command is resident (RES) in the load.

Command description

The OFFL command, which is only valid on a ManB channel, offlines a specified channel.

Warning

No warnings are generated by the OFFL command.

Command syntax

Whenever a user requests help on the OFFL command from the OCDL command line, the help panel displays the following information:

OFFL:Offline a specified channel
Parms:<CHNL>...{0 TO 31}
[<ALL> {ALL}]

Parameter definitions

Table 3-87 OFFL Parameters

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies which channel (OCDL) is to be offlined.
<ALL>	ALL	Specifies that all channels (OCDL) are to be offlined.

Responses: OFFL

When the OFFL command is entered, several replies are possible.

Response 1

Channel <number> OffL Passed

Explanation:

The OFFL command was successful.

System action:

The specified channel is offlined and an 'O' is placed under the corresponding label at the MAP display. No system actions are performed on the channel while it is in the OffL state.

User action:

No user action is required in response to the OFFL action.

Response 2

Request Invalid: Channel <number> is <current state>

Explanation:

The OFFL command has been rejected. The task could not be performed because the channel is not in a manual busy state.

System action:

No system action is taken.

User action:

Ensure that the channel is in the proper state before attempting the OFFL again.

Command name: CONT**Command type**

CONT is a menu command.

Command target

The command target for the CONT command includes all CM platforms.

Command availability

The CONT command is resident (RES) in the load.

Command description

The CONT command is used to execute an internal or external continuity test on a specified ManB OC channel.

Warning

No warnings are generated by the CONT command.

Command syntax

Whenever a user requests help on the CONT command from the OCDL command line, the help panel displays the following information:

Cont: Perform a continuity test on a specified ManB channel.

Parms: <CHNL>...{0 TO 31}

[<LOOPBKTYPE> {INT, EXT}]

Parameter definitions

Table 3-88 CONT Parameters

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies the OC data link on which to perform the CONT test.
<LOOPBKTYPE>	INT	The INTERNAL specification results in a loopback being performed on an EISP card. This is the default test type.
<LOOPBKTYPE>	EXT	The EXTERNAL specification causes messages to be run to the DS-0s and requires a manual loopback to be set up external to the TMS.

Responses: CONT

When the CONT command is entered, several replies are possible. Potential responses are:

Response 1

Has the loopback point been set?

Please confirm ("YES," "Y," "NO," or "N"):

Explanation:

The EXTERNAL loopback type has been specified. Loopback point confirmation must now be entered by the user.

System action:

If the reply is affirmative, the system continues execution of the CONT test. If the reply is negative, execution of the test is terminated.

User action:

Enter the requested confirmation.

Response 2

- Channel 1 loop point set passed
Internal continuity test passed
Loop point removed
- External continuity test passed
Please remove loopback point

Explanation:

The CONT test has been properly executed and the continuity information for the OC data link in question is displayed. When an INTERNAL loopback type has been specified, response (a) is given and when an EXTERNAL type has been specified, response (b) is shown.

System action:

No system action is taken.

User action:

No user action is required.

Response 3

Request Invalid: Channel <number> is <current state>

Explanation:

The CONT command has been rejected. The specified channel is not in the ManB state.

System action:

No system action is taken.

User action:

Ensure that the channel is in the ManB state. Then try the CONT command again.

Response 4

No response from PM.

Explanation:

The CM is unable to communicate with the ETMS peripheral.

System action:

No system action is taken.

User action:

Execute command again or investigate trouble.

Command name: LOOPBK

Command type

LOOPBK is a menu command.

Command target

The command target for the LOOPBK command includes all CM platforms.

Command availability

The LOOPBK command is resident (RES) in the load.

Command description

The LOOPBK command, which is only valid on a ManB OC data link, allows a loopback point to be queried, set up, or taken down. This causes the incoming data from the far end to loop back to the far end for continuity tests. This is for external loopback tests.

Warning

No warnings are generated by the LOOPBK command.

Command syntax

Whenever a user requests help on the LOOPBK command from the OCDL command line, the help panel displays the following information:

Loopbk:Sets a loopback point at the EISP and then loops back a DS-0.
Parms:<CHNL>...{0 TO 31}
[<LOOPBACKOPTION> {SETUP, QUERY, RLS}]

Parameter definitions

Table 3-89 LOOPBK Parameters

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies the link on which to perform the LOOPBK test.
<OPTION>	SETUP	Sets a loopback point.
<OPTION>	QUERY	Checks to see if a loopback point has been set.
<OPTION>	RLS	Takes down a loopback point.

Responses: LOOPBK

When the LOOPBK command is entered, several replies are possible.

Response 1

- (a) The loopback point has been set.
- (b) A loopback point has been set.
- (c) The loopback point has been removed.

Explanation:

The LOOPBK command has executed successfully. If the SETUP option was specified, response (a) is displayed. If the QUERY option was specified, response (b) is shown and if the RLS option was given, response (c) is given.

System action:

No system action is taken.

User action:

No user action is required.

Response 2

- (a) The loopback point was not set because communication with the peripheral could not be established.
- (b) The loopback point could not be verified because communication with the peripheral could not be established.

(c)The loopback point could not be removed because communication with the peripheral could not be established.

Explanation:

The LOOPBK test has failed because communication with the peripheral cannot be established. Depending on whether the SETUP, QUERY, or RLS option is specified, response (a), (b), or (c) is displayed, respectively.

Response 3

Request Invalid: Channel <number> is <current state>

Explanation:

The LOOPBK command has been rejected. The specified channel is not in the ManB state.

System action:

No system action is taken.

User action:

Ensure that the channel is in the ManB state. Then try the LOOPBK command again.

Response 4

This channel has a loopback set.

Explanation:

The LOOPBK command has been rejected. There is already a loopback point set for the specified channel.

System action:

No system action is taken.

User action:

No user action is required.

Command name: OCPING**Command type**

OCPING is a menu command.

Command target

The command target for the OCPING command includes all CM platform

Command availability

The OCPING command is resident (RES) in the load.

Command description

The OCPING command, which is only valid on an inservice ETMS OC data link, performs an OCPING which can be initiated at either end (host or remote). A message containing a time stamp is sent to the receiving office and is immediately returned to the sending office. The sending office retrieves the time stamp from the message, subtracts it from the time at receipt, and reports the difference via the MAP. This test provides an indication of end-to-end transit time for messages on the link under test as well as end-to-end continuity. If the OCPING message is not received back from the far end within a time-

out limit of ten seconds, an error message is displayed. Please reference the following figure for a functional diagram of OCPING.

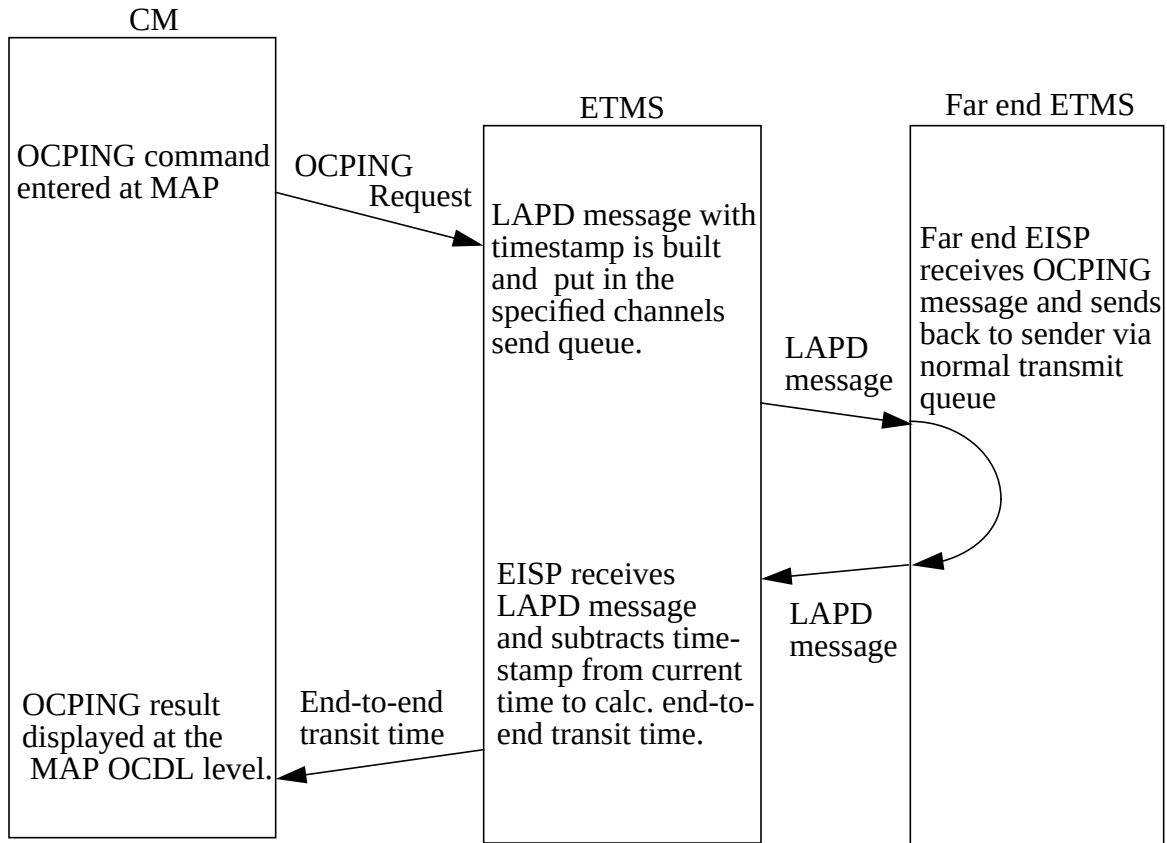


Figure 3-17 OCPING Functional Diagram

“PING” is standard computer network test terminology. This is used in testing continuity in computer networks.

Warning

No warnings are generated by the OCPING command.

Command syntax

Whenever a user requests help on the OCPING command from the OCDL command line, the help panel displays the following information:

OCPing: Performs an OC specific loopback on an InSv OCDL(EISP channel).

Parms:<CHNL>...{0 TO 31}

Parameter definitions

Table 3-90 OCPING Parameters

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies the link on which to perform the OCPING test.

Responses: OCPING

When the OCPING command is entered, several replies are possible. Potential responses are:

Response 1

The end-to-end transmission time resulting from execution of the OCPING test was: ##### milliseconds.

Explanation:

The OCPING command has executed successfully. The time displayed is in milliseconds.

System action:

No system action is taken.

User action:

No user action is required.

Response 2

Request Invalid: Channel <number> is <current state>

Explanation:

The OCPING command has been rejected. The specified channel is not in the InSv state.

System action:

No system action is taken.

User action:

Ensure that the channel is in the InSv state. Then try the OCPING command again.

Response 3

Test Failed: No response within timeout period.

Explanation:

The OCPING test has failed. There was no response from the far end within the timeout period of ten seconds.

System action:

No system action is taken.

User action:

Ensure that no faults exist with the far end. Then try the OCPING command again.

Response 4

No response from PM.

Explanation:

The CM is unable to communicate with the ETMS peripheral.

System action:

No system action.

User action:

Execute command again or investigate trouble.

Command name: QCHOM**Command type**

QCHOM is a non-menu (hidden) command.

Command target

The command target for the QCHOM command includes all CM platforms.

Command availability

The QCHOM command is resident (RES) in the load.

Command description

The QCHOM command, which must be issued on a link that is InSv, MBsy, or SysB, causes the LAPD messaging operational measurements (OMs) to be displayed on a per channel (OC data link) basis. The LAPD OMs are described as follows:

- TXDSC: number of LAPD frames to be transmitted that were discarded by EISP
- CRCERRS: number of received LAPD frames with bad CRCs
- RXDSC: number of received LAPD frames discarded due to link errors
- SAPI1TX: number of SAPI 1 frames transmitted
- SAPI1RX: number of SAPI 1 frames received
- SAPI0TX: number of SAPI 0 frames transmitted
- SAPI0RX: number of SAPI 0 frames received
- LKRESTL: number of times the link has been reset by the EISP (local reset)
- LKRESTR: number of times the link has been reset by the far end (remote reset)
- RNRTX: number of LAPD RNR frames transmitted
- RNRRX: number of LAPD RNR frames received
- REJTX: number of LAPD REJ frames transmitted
- REJRX: number of LAPD REJ frames received
- OCRXP: number of OC messages received successfully
- OCRXF: number of OC messages received unsuccessfully
- OCTXP: number of OC messages transmitted successfully
- OCTXF: number of OC messages transmitted unsuccessfully
- OCRXD: number of OC messages received that were discarded

- OCTXD: number of OC messages to be transmitted that were discarded

Additional OMs concerning the OCDL processor data are displayed when the QCHOM command is executed. Note that this data represents the CPU occupancy statistics and is not on a per channel basis. The processor statistics are as follows:

- CPUA_1m_avg: 1 minute average CPUAvail time
- IPCP_1m_avg: 1 minute average ipc free buffer pool
- LIPCP_1m_avg: 1 minute average long ipc free buffer pool
- BUFP_1m_avg: 1 minute average rockwell buffer free pool
- RRCVQ_1m_avg: 1 minute average rockwell buffer receive queue

Warning

No warnings are generated by the QCHOM command.

Command syntax

Whenever a user requests help on the QCHOM command from the OCDL command line, the help panel displays the following information:

QCHOM:Displays LAPD messaging OMs.
Parms:<CHNL>...{0 TO 31}

Parameter definitions

Table 3-91 QCHOM Parameters

PARAMETER	VALUE	DEFINITION
<CHNL>	0..31	Specifies the link on which to perform the QCHOM test

Responses: QCHOM

When the QCHOM command is entered, several replies are possible.

Response 1

OCDL Protocol OMs:

TXDSC0CRCERRS	0
RXDSC0SAPI1TX	0
SAPI1RX0SAPI0TX	0
SAPI0RX0LKRESTL	0
LKRESTR0RNRTX	0
RNRRX0REJTX	0
REJRX0OCRXP	0
OCRXF0OCTXP	0
OCTXF0OCRXD	0
OCTXD0	

OCDL Processor Data:

CPUA_1m_avg0IPCP_1m_avg0
 LIPCP_1m_avg 0BUFP_1m_avg0
 RRCVQ_1m_avg0

Explanation:

The QCHOM command has executed successfully. LAPD OMs that are associated with the channel that was specified are displayed. These OMs are incremented until they reach their maximum value (32767) or after 15 minutes, at which time they are cleared and the count begins again.

System action:

No system action is taken.

User action:

No user action is required.

Response 2

No Action Taken: Channel <number> is not provisioned or datafilled.

Explanation:

The QCHOM command has been rejected because the specified channel is not provisioned or datafilled.

System action:

No system action is taken.

User action:

Ensure that the channel is provisioned and datafilled. Then try the QCHOM command again.

Response 3

Request Invalid: Channel <number> is <current state>

Explanation:

The QCHOM command has been rejected. The specified channel must be in the InSv, ManB, or SysB state.

System action:

No system action is taken.

User action:

Ensure that the channel is in the InSv state. Then try the QCHOM command again.

Response 4

No response from PM.

Explanation:

The CM is unable to communicate with the ETMS peripheral.

System action:

No system action.

User action:

Execute command again or investigate trouble.

Command name: QOCDL**Command type**

QOCDL is a menu command.

Command target

The command target for the QOCDL command includes all CM platforms.

Command availability

The QOCDL command is resident (RES) in the load.

Command description

The QOCDL command is capable of displaying ETMS OC data link information based on the following parameters:

- <No Parameter> - This will cause the QOCDL command to display data link information for all data links datafilled on the posted TMS.
- ALL - This will cause the QOCDL command to display data link information for all data links that are datafilled in table TMSOCDL.
- OFFL, MANB, SYSB, CBSY, INSV - This will cause the QOCDL command to display data link information for all data links in the office that are in the specified state.
- <OCDLGRP> - When an OC data link group name in table OCDLGRP is specified, data link information for all data links in that group is displayed. Also, the corresponding voice link group is displayed.
- LINK <OCDL> - When LINK and the OC data link number is specified, data link information for the link number on the posted TMS is displayed. Also, the corresponding voice link group is displayed.

Warning

No warnings are generated by the QOCDL command.

Command syntax

Whenever a user requests help for the QOCDL command from the OCDL command line, the help panel displays the following information:

```
QOCDL:Displays information for ETMS OC data links.
Parms:<QINFO> ... {ALL |
                                OFFL | MANB | SYSB | CBSY | INSV |
<OCDLGRP> |
LINK <OCDL> ... {0 TO 31}}
```

Parameter definitions

Table 3-92 QOCDL Parameters

PARAMETER	VALUE	DEFINITION
No parameter	N/A	Specifies that all data links for the posted TMS are to be displayed.
<QINFO>	ALL	Specifies that all data links are to be displayed.
	OFFL, MANB, SYSB, CBSY, INSV	Specifies that all data links that are in a particular state are to be displayed.
	<OCDLGRP>	Specifies that all data links that belong to a particular OCDL group, which is datafilled in table OCDLGRP, are to be displayed.
	LINK	Specifies that information for a particular data link on the posted TMS is to be displayed.
<OCDL>	0 ... 31	When the first parameter equals "LINK," then this parameter specifies the OC data link to be displayed.

Responses: QOCDL

When the QOCDL command is entered, several replies are possible. Potential responses are:

Response

(a): > QOCDL ALL

```
OCDLGRPDLINDEXTMSOCDL # PROTLEVSTATE
=====
CARYDL11      1      1 HIGHInSv
CARYDL12      2      1 HIGHInSv
RALEIGHDL23   1      2 MEDIUMSysB
RALEIGHDL24   2      2 MEDIUMInSv
DURHAMDL35    1      3 LOW SysB
DURHAMDL36    2      3 LOW OffL
```

(b): > QOCDL INSV

```
OCDLGRPDLINDEXTMSOCDL#PROTLEVSTATE
=====
CARYDL11      1      1HIGH InSv
CARYDL12      2      1HIGH InSv
RALEIGHDL24   2      2MEDIUMInSv
```

(c): > QOCDL CARYDL1

```
OCOFC: CARY1          VLGRP: CARYVL1
```

```

OCDLGRPDLINDEXTMS  OCDL#  PROTLEVSTATE
=====
CARYDL12           2      1  HIGHInSv
=====CARYDL1  111HIGHInSv

```

(d): > QOCDL LINK 1

OCOFC: CARY1 VLGRP: CARYVL1

```

OCDLGRPDLINDEXTMS  OCDL#  PROTLEVSTATE
=====
CARYDL11           1      1  HIGHInSv
=====

```

Explanation:

The QOCDL command has executed successfully. Data links are displayed based on the <QINFO> option which was specified. Response:

- (a) is given if the ALL option was given
- (b) is given if a maintenance state was specified
- (c) is given if a particular OCDLGRP group was specified
- (d) is given if LINK and a link number was specified.

System action:

No system action is taken.

User action:

No user action is required.

Alarms

PM alarm raised when OC Data Link is System Busy

Conditions required to raise the alarm

When an OC data link goes system busy, the TMS will go ISTb. An alarm will be displayed at the PM alarm banner at the top of the MAPCI display. This provides an immediate indication that a potential error condition exists.

The QueryPM flt command can be used to assist in identifying the cause of the PM alarm for this scenario. In the event an ETMS OC data link is SysB, causing the minor PM alarm to be raised, the QueryPM flt command would display the following:

- Node is ISTb
OC Data Link SysB. Check the following.
1. OCDL level to identify SysB link.
 2. Carrier level.
 3. Far end for maintenance state.

Unit 0
no fault exists
Unit 1
no fault exists

In addition, the QOCDL command can be used to help identify the data link in trouble, and that data link's attributes, such as the far end office to which it is interfaced. This information can assist in facilitating the notification of the far end office (host or remote) personnel of the error condition.

The generation of the TOPS300 log will also indicate that an ETMS OC data link is SysB.

Conditions required to clear the alarm

The TMS will remain ISTb until all OC data links are returned to service. This means there are no OC data links in the SysB state. The system busy state is denoted by 'S' under the OCDL number in the OCDL MAP level.

The following figure depicts an OCDL error condition where a channel has gone SysB (in this case channel 0). Notice that an alarm has been posted, the number of ISTb PMs has increased by one and the number of PMs that are InSv has decreased by one (as compared to the previous MAP display in Figure 1). The state of the TMS changes to ISTb and the channel is labelled with an 'S'.

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL
.	.	.	.	1TMS	.	.	.	.	.
OCDL				SysB	ManB	OffL	CBsy	ISTb	InSv
0	Quit	PM		0	0	0	0	1	59
2		TMS		0	0	0	0	1	1
3									
4		TMS	0 ISTb	Links_00S: CSide 0, PSide 0					
5		Unit0:	Act	InSv					
6		Unit1:	Inact	InSv					
7	Bsy_								
8	RTS_	OCDL		1111111111	2222222222	33			
9	OffL_		0123456789	0123456789	0123456789	01			
10			S			--			
11									
12		QOCDL LINK 0							
13									
14		OCOFC: HOST1				VLGRP: CARYVL1			
15	Cont_								
16	Loopbk_	OCDLGRP	DLINDEX	TMS	OCDL#	PROTLEVL	STATE		
17	OCPing_	=====	=====	=====	=====	=====	=====		
18	QOCDL	CARYDL1	1	0	0	HIGH	SysB		
TIME 15:31 >									

Figure 3-18 OCDL MAP Level Screen Display With An Alarm

AN1137mm.aa20

The MM section of this feature document discusses the human machine interface changes introduced in the TPC04 stream. The following are included:

- Toll Break-In (TBI) & R2
- International Direct Distance Dialing (IDDD)
- External Real-Time Rating System (RTRS)

A detailed description of each feature element can be found in the following pages.

TBI & R2

TOPS MP changes

Two new functions have been added to the MP's fourth function page. The figure on the following page shows a TOPS MP display of the fourth function page with the new TBI functions. Although the figure shows only English strings for the new functions, a TOPS MP datafilled for French or Spanish position language would show translations as follows:

Language	Function 60	Function 61
English	"Start/Stop Calling TBI"	"Start/Stop Called TBI"
French	"Act/Désact intrus dmr" short for "Activation/Désactivation intrusion demandeur"	"Act/Désact intrus dmé" short for "Activation/Désactivation intrusion demandé"
Spanish	"Interven/No Interven A" short for "Intervención/No Intervención A"	"Interven/No Interven B" short for "Intervención/No Intervención B"

Table 3-93 TOPS MP TBI Functions Menu Translations

As with any MP function, TBI functions can be invoked from a displayed or a hidden functions menu. The functions menu is displayed by pressing **FncTs** twice, and then once more for each page to be advanced. Any function can be invoked from any menu page by typing the function number followed by **Start**. If the function number is already known, the function can be invoked directly. This is done by pressing **FncTs** once, and then typing the function number followed by **Start**.

A quicker and more convenient method of invoking any MP function has been to datafill that function onto one of the available hardkeys via TAMI datafill. Then any **FncTs** + <function #> + **Start** key sequence can be replaced by the single press of that hardkey. It should be noted that with TPC03, the number of definable hardkeys increased from six to thirty-two. Each of these thirty-two hardkeys can be defined as any function, including the new TBI functions 60 and 61 (reference section 2.2). See TPC03 documentation, AN0796 "TPC03: Human-Machine Interface Changes - Expanded Hardkeys" FN and MM sections, for further details on defining hardkeys. Also see TPC36 documentation, AN0212 "Customer Configurable Keyboard" FN and MM sections, for details on assigning hardkey actions to physical MP keys.

With this feature, a new MP congestion indicator has also been created. This indicator is discussed in more detail later in this section.

	12:00	L1	L2
TOLL Clg Cld Spl IC Misc	FUNCTIONS 57 General Assistance 58 Directed Assistance 59 Paged Assistance 60 Start/Stop Calling TBI 61 Start/Stop Called TBI		

Figure 3-19 MP fourth functions page.

Typical TBI calls

There are many different manual TBI call variations. For the purpose of explanation, two typical TBI call scenarios are described.

Operator TBI on Called

In the first call scenario, four parties are involved; calling party, operator, called party, and associated party. The calling party is the subscriber desiring the TBI service; the operator is the party actually performing or controlling the TBI service; the called party is the person the calling party desires to speak with; and the associated party is the person who is already talking to the called party prior to the start of TBI.

In this call scenario, the calling party has been trying to directly call the called party for some time, but keeps getting a “busy” signal. Thus the calling party calls the operator via a 0+ call, and once connected to the operator, the calling party requests TBI on the called party. Accordingly, the operator outpulses the called number (i.e. presses **Cld** + digits + **Start**) and receives “busy”. Here “busy” line state is indicated to the operator via a headset “busy” signal and an inverted called bar (reference figure 2). Up to this point in the call scenario, there has been no new TPC/MP functionality.

At this point, having heard and seen “busy” indications, the operator now initiates the requested TBI by invoking the new **Start/Start Called TBI** function (i.e. operator presses “**Fncts** + 61 + **Start**” or an equivalent hardkey). If “TBI start” is successful, the operator no longer gets headset “busy” and is connected to the called party and associated party. An intrusion tone is also heard by all parties. Note that the MP screen display does not change. Successful “TBI start” is solely indicated to the operator by headset audio. Having successfully broken-in, the operator informs the called party and associated party of the waiting call, and asks the called party if he or she wants to accept the incoming call. If the called party agrees, the operator tells both the called and associated parties to hang up so that the called party can receive the incoming call.

Having made the announcement to the called and associated parties, the operator terminates TBI by again doing the new **Start/Stop Called TBI** function (i.e. operator presses “**Fncts** + 61 + **Start**” or an equivalent hardkey). Assuming the called party has not already hung up, the operator once again hears “busy”. When the called party hangs up, the operator then hears silence instead of “busy”. The lack of “busy” is the cue for the operator to ring the called party by doing the standard **Ring Called** function (i.e. operator presses “**Fncts** + 4 + **Start**” or an equivalent hardkey). After the called party answers, the operator then floats the call as normal. During this call scenario the operator may also have to handle billing. This would be done according to the operating company’s practices.

		12:00	L1 	L2
TOLL 0+				
Clg	619-322-7000			
Cld ▶	619-322-8101			
Spl				
IC				
Misc				
No AMA	Notify	Charge Adjust		
			Time Charges	

Figure 3-20 Called number outputted and busy.

Operator TBI on Calling

In the second typical call scenario, three parties are involved; operator, calling party, and associated party. The operator is the party wishing to speak to the calling party and is also the party actually performing or controlling TBI; the calling party is the person the operator desires to speak with; and the associated party is the person who is already talking to the calling party prior to the start of TBI.

In this call scenario, the operator is initiating a call to a “busy” line. A common reason for an operator initiated call is a booked call. On a booked call, at the designated time the operator will be prompted to retrieve a calling number (and possibly a called number) from a database and then attempt to connect to the calling number. Whether or not “operator to calling party TBI” is motivated by a booked call does not change the steps for “operator to

calling party TBI". The operator first calls the calling party (e.g. presses **Clg** + digits + **Start**) and receives "busy". Here "busy" line state is indicated to the operator via a headset "busy" signal and an inverted calling bar (reference figure 3). Up to this point in the call scenario, there has been no new TPC/MP functionality.

At this point, having heard and seen "busy" indications, the operator now initiates the desired TBI by invoking the new **Start/Stop Calling TBI** function (i.e. operator presses "**Fncts** + 60 + **Start**" or an equivalent hardkey). If "TBI start" is successful, the operator no longer gets headset "busy" and is connected to the calling party and associated party. An intrusion tone is also heard by all parties. Note that the MP screen display does not change. Successful "TBI start" is solely indicated to the operator by the headset audio. Having successfully broken-in, the operator now converses with the calling party and associated party. In the case of the booked call, the operator informs the calling party of the booking.

Having made the announcement, the operator terminates TBI by again doing the new **Start/Stop Calling TBI** function (i.e. operator presses "**Fncts** + 60 + **Start**" or an equivalent hardkey). Assuming the calling party has not already hung up, the operator once again hears "busy". In the case of a booked call, the operator during TBI may have requested that the calling party hang up so that, per the booking, the operator could then attempt to connect the calling party to a called party. To connect the two parties, the operator would wait for the "busy" headset signal to stop indicating the calling party had hung up, then the operator would do the standard **Ring Calling** function (i.e. operator presses "**Fncts** + 3 + **Start**" or an equivalent hardkey). The operator could then attempt to connect to the called party by doing the standard **Ring Called** function (i.e. operator presses "**Fncts** + 4 + **Start**" or an equivalent hardkey). If the called party's line was "busy", the operator could again use TBI. This time TBI would be on the called party (reference section 2.1.1.1). After the calling and called parties answer, the operator then floats the call as normal. During this call scenario the operator may also have to handle billing. This would be done according to the operating company's practices.

		12:00	L1 	L2
TOLL				
Clg ▶	619-322-7000			
CId	619-322-8101			
Spl				
IC				
Misc				
No AMA	Notify	Charge Adjust		Time Charges

Figure 3-21 Calling number outpulsed and busy.

Less Typical TBI

There are less typical TBI call variations. For example, on any TBI call depending on the end office, multiple TBI's can be done. This is useful when the previously interrupted party has agreed to hang up, but forgets to do so. The operator can initiate TBI again, reminding the interrupted party to hang up. In other words, as long as the desired party has a "busy" line state, the appropriate TBI function can be repeated. Similarly, if a TOS/TOE (start/stop TBI) signal is lost somewhere by the network, then the operator may key another TBI function re-attempting TBI initiation or termination.

Another TBI variation is when congestion exists in the network. Actually TBI cannot be done if there is network congestion. A voice path must first be established between the operator and called or calling party's central office before TBI can be initiated. To enhance TBI HMI, the TBI feature also provides TPC/MP support for a network congestion indicator. This display is

helpful for those networks where congestion is not always indicated to the operator via a “fast busy” audio signal. After the operator output pulses the calling or called number, the switch, if appropriate, can tell the MP to display the congestion indicator. This indicator will be displayed for several seconds similar to other indicators that appear in this same field. The operator seeing this indicator thus need not attempt TBI. Figure 4 on the following page shows the congestion indicator for an outputted calling number that met with network congestion. Also note in figure 4 that as always the calling bar is inverted when there is a “busy” line condition.

Figure 4 shows the congestion indicator for an English operator position. A TOPS MP datafilled for French or Spanish position language would show translations for the congestion indicator as follows:

Language	Congestion indicator
English	“Congestion”
French	“Encombrement”
Spanish	“Congestión”

Table 3-94 TOPS MP Network Congestion Indicator Translations

		12:00	L1 [Icon]	L2
Congestion				
TOLL				
Clg ▶	619-322-7000			
CId	619-322-8101			
Spl				
IC				
Misc				
No AMA	Notify	Charge Adjust		
		Time Charges		

Figure 3-22 Calling number outpulsed and network congestion indicated.

TPC TAMI changes

The hardkey datafill screen on the TAMI now accommodates the two new TBI functions which have been introduced by this feature. In the hardkey datafill screen, the new functions may be entered as follows:

start/stop calling tbi
start/stop called tbi

IDDD

Background

The current international dialing plan allows for a phone number to consist of up to 12 digits. These 12 digits include the country code, city code, and

extension. When a customer requests to make an international call, the operator enters the digits in the CLD entry field of the call processing box and presses Start. The switch will then validate the phone number. Typically, the CM does not know how to format a foreign number, so it inserts one dash between the country code and the rest of the number and displays it in the CLD entry field. Allowing for the possibility of additional formatting in the future, three extra characters were reserved. This brought the total requirement for display to 16 characters (12 digits, 4 dashes)

A new standard for international dialing is being introduced. It calls for the maximum number of digits to be increased to 15. Given that currently only one dash is used in formatting foreign numbers, this could still fit in the CLD entry field of the MP. However, in the future, CMs may be required to start formatting these numbers differently. There is not enough room to display a 15-digit number with more than one dash, thus leading to truncation. As a result, the CLD entry field needs to be extended in order to allow for the display of potentially larger formatted CLD numbers.

TOPS MP Changes

				12:00	L1 	L2
TOLL 0 Clg Clid ▶ 49-3012345678901 Spl IC Misc						
No AMA	Notify	Charge Adjust	Dial Rate	Time Charges		

Figure 3-23 Example 0+ call using all 19 characters for display

The above figure illustrates an international call requiring the full 16 characters to display a call to Germany. The one dash between the country code and the rest of the number is the only formatting that is done.

				12:00	L1 	L2
TOLL 0						
Clg						
Clid ▶	123-56-89-123-56789					
Spl						
IC						
Misc						
No AMA	Notify	Charge Adjust	Dial Rate	Time Charges		

Figure 3-24 Example 0+ call using all 19 characters for display

The above figure illustrates a hypothetical call where a full 19 characters of space is required to display the formatted international number. The extended CLD entry field behaves as in previous TPC loads. Whatever the output display size, the entry input is always one less. Thus while the CM previously used only 12 digits, the MP allowed for the entry of up to 15 digits. Similarly, while the CM now uses only 15 digits, the MP will allow for the entry of up to 18 digits. As before, the MP clears the entire CLD entry field when the operator attempts to add anything beyond the end of the entry field (19th digit) (previously 16th digit).

		12:00	L1 ▲	L2
TOLL 0				
Clg				
Cld ▶	<383-56-89-123-56789>			
Spl				
IC				
Misc				
No AMA	Notify	Charge Adjust	Dial Rate	Time Charges

Figure 3-25 Example of an invalid 0+ call, all 19 characters blinking.

The above figure illustrates yet another hypothetical call where all 19 characters were needed to display a 0+ call. In this case, the CM has determined that this number is invalid. Note that the < > indicates a flashing display.

RTRS

Background

Billing rate queries are presently done on the CM. With a group of external Real-Time Rating System (RTRS) CM features, this rating can be done via an external database tied to the CM. The TOPS MP now supports external RTRS by providing for a “waiting” or “query in progress” indicator, a “query failure” indicator, and a “query not attempted” indicator.

TOPS MP Changes

External RTRS “Waiting” indicator

		12:00	L1 	L2
TOLL 0+ Coin Pre				
Clg	603-622-4023			
CId	704-533-8093			
Spl ▶	—			
IC				
Misc				
CALL DETAILS				
Overtime Type: PRE				
No AMA	Notify	Charge Adjust	Dial Rate	Coin Collect Coin Return Over Collect

Figure 3-26 Example 0+ call with the external RTRS “waiting” indicator

The above figure shows the external RTRS “waiting” indicator. “Waiting” here means “query in progress”. Notice that the indicator is a clock icon and that it appears at the beginning of the third line of the MP’s “message status area”. This indicator is displayed whenever there is an RTRS query in progress. See DDOC AN1457 “TOPS Real-Time Rating Call Processing Interface” for all the call scenarios that may show this “waiting” indicator. In the above example, the RTRS “waiting” indicator could have been displayed as a result of the operator changing the called number. When the operator changes the called number, a query is automatically launched to get a new billing rate.

External RTRS “query fail” indicator

Rtr FI		12:00	L1 	L2												
<table border="1"> <tr> <td colspan="2">TOLL 0+ Coin Pre</td> </tr> <tr> <td>Clg</td> <td>603-622-4023 </td> </tr> <tr> <td>Cld</td> <td>603-622-4044</td> </tr> <tr> <td>Spl ▶</td> <td>—</td> </tr> <tr> <td>IC</td> <td></td> </tr> <tr> <td>Misc</td> <td></td> </tr> </table>					TOLL 0+ Coin Pre		Clg	603-622-4023 	Cld	603-622-4044	Spl ▶	—	IC		Misc	
TOLL 0+ Coin Pre																
Clg	603-622-4023 															
Cld	603-622-4044															
Spl ▶	—															
IC																
Misc																
<table border="1"> <tr> <td colspan="2">CALL DETAILS</td> </tr> <tr> <td colspan="2">Chg: \$999.99</td> </tr> <tr> <td colspan="2">Min: 999:99</td> </tr> <tr> <td colspan="2">Overtime Type: PRE</td> </tr> </table>					CALL DETAILS		Chg: \$999.99		Min: 999:99		Overtime Type: PRE					
CALL DETAILS																
Chg: \$999.99																
Min: 999:99																
Overtime Type: PRE																
No AMA	Notify	Charge Adjust	Dial Rate	Coin Collect	Coin Return	Over Collect										

Figure 3-27 Example DA 411 Hotel call with the external RTRS “query fail” indicator

The above figure shows the external RTRS “query fail” indicator. Notice that the indicator is “Rtr FI” which is short for “Rater Fail”. The indicator appears at the beginning of the third line of the MP’s “message status area”. This indicator is only displayed after an RTRS query has been attempted and has failed. See DDOC AN1457 “TOPS Real-Time Rating Call Processing Interface” for all the call scenarios that could show this indicator. The indicator above could have been displayed just after call arrival, after the query attempt had failed. Notice also that invalid charges are displayed in the call details window since the rating failed.

A TOPS MP datafilled for French or Spanish position language would show translations for the “query fail” indicator as follows:

Language	Query Fail Indicator
English	"Rtr FI" short for "Rater Fail"
French	"ErrTar" short for "Erreur Tarif"
Spanish	"Cgo Frc" short for "Cargo Fracaso"

Table 3-95 TOPS MP "query fail" Indicator Translations

External RTRS "query not attempted" indicator

No Rtr		RES E	12:00	L1 	L2																		
<table border="1"> <tr> <td>DA</td> <td colspan="2">411 Hotel</td> </tr> <tr> <td>Clg</td> <td>603-622-4023</td> <td></td> </tr> <tr> <td>Cld</td> <td></td> <td></td> </tr> <tr> <td>Spl</td> <td></td> <td></td> </tr> <tr> <td>IC</td> <td colspan="2"></td> </tr> <tr> <td>Misc</td> <td></td> <td>R 4123</td> </tr> </table>						DA	411 Hotel		Clg	603-622-4023		Cld			Spl			IC			Misc		R 4123
DA	411 Hotel																						
Clg	603-622-4023																						
Cld																							
Spl																							
IC																							
Misc		R 4123																					
No AMA		Charge Adjust		Name																			

Figure 3-28 Example DA 411 Hotel call with the external RTRS "query not attempted" indicator

The above figure shows the external RTRS “query not attempted” indicator. Notice that the indicator is “No Rtr” which is short for “No Rater Attempted”. The indicator appears at the beginning of the third line of the MP’s “message status area”. This indicator is displayed instead of the “waiting” indicator when for some reason, an RTRS query could not be launched by the CM. In the above example, the RTRS “query not attempted” indicator could have been displayed at call arrival indicating that the CM was not able to launch the external database query for rating the DA 411 Hotel call.

A TOPS MP datafilled for French or Spanish position language would show translations for the “query not attempted” indicator as follows:

Language	Query Not Attempted Indicator
English	“No Rtr” short for “No Rater”
French	“AucTar” short for “Aucun Tarif”
Spanish	“Cgo NoD” short for “Cargo No Disponible”

Table 3-96 TOPS MP “query not attempted” Indicator Translations

External RTRS successful query

There is no specific indicator for successful rating queries. On sent paid hotel calls where the operator usually does not need to see the rating, the charges are not be shown. On coin calls, where the operator needs to see the rating, the charges are shown in the call details window (see figure below).

		12:00	L1 	L2
TOLL 0+ Coin Pre				
Clg	603-622-4023			
Cld	603-622-4044			
Spl ▶	—			
IC				
Misc				
CALL DETAILS				
Chg: \$1.20				
Min: 2:00				
Overtime Type: PRE				
No AMA	Notify	Charge Adjust	Dial Rate	
			Coin Collect	Coin Return
			Over Collect	

Figure 3-29 Example DA 411 Hotel call with the external RTRS “query fail” indicator

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Directories

There are two directories affected by this feature: rccdir, rccidir. There is also one new directory bits_dir.

Table of new/modified directories

Table 3-97New/Modified directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
Rccdir	Changed			Nonres
Rccidir	Changed			Nonres
BITS_dir	New		New BITS sub-level	Nonres

Accessing directory: Rccdir

To access

Command used to enter this directory: Mapci;Mtc;Pm;Post rcc2
<Rcc_No>

while using non-ISP16 equipped RCC2.

To return to CI

Command used to exit this directory to CI: quit all.

Accessing directory: Rccidir.

To access

Command used to enter this directory: Mapci;Mtc;Pm;Post rcc2
<Rcc_No>

while using ISP16 equipped RCC2.

To return to CI

Command used to exit this directory to CI: quit all.

Accessing directory: Bits_dir.**To access**

Command used to enter this directory:
Mapci;Mtc;Pm;Post rcc2 <Rcc_No>;Bits.

To return to CI

Command used to exit this directory to CI: quit all.

Commands**Table of New/modified commands****Table 3-98 New commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
Bits	New		Rccdir,Rccidir
SwRef_	New		Bits_dir
EnblRef_	New		Bits_dir
DsblRef_	New		Bits_dir
Sync_	New		Bits_dir
QueryClk	New		Bits_dir

Command name: Bits**Command type**

MENU.

Command target

SUPERNODE.

Command availability

NONRES.

Command description

The command is a new entry for a new PM sub-level 'BITS'. The new level is for executing a set of new commands on the RCC2 external clock (BITS).

Warning

N/A

Command syntax

BITS.

Parameter definitions

Table 3-99 Command parameters

PARAMETER	VALUE	DEFINITION
N/A		

Responses and their explanations

Table 3-100 Responses & explanations

Response	Explanation
'BITS:'	The prompt for the 'BITS' level. Entering to the BITS level is available only if An RCC2 is posted and the RCC2 has BITS defined.
'RCC2 #n BITS not defined.'	The posted RCC2 has no BITS defined.
'RCC2 #n BITS level cannot be entered.'	Entering the 'BITS' level is disallowed.

System action:

Enter to the new level and displaying the sync status.

User action:

Type Bits end press enter.

Command name: SwRef**Command type**

MENU.

Command target

SUPERNODE.

Command availability

NONRES.

Command description

The command allows the craftperson to instructs the specified RCC2 clock unit(s) to switch between the active and the standby reference link.

Warning

The command is allowed per unit only if the other unit is in Holdover (HLDVR) mode.

For more information Please refer to “Table 3-102 Responses & explanations” on page 258.

Command syntax

SwRef <Pm | Unit <0 | 1>>.

Parameter definitions

Table 3-101 Command parameters

PARAMETER	VALUE	DEFINITION
PM	N/A	
unit	0,1	

Responses and their explanations

Table 3-102 Responses & explanations

Response	Explanation
'RCC2 #n <unit #n> Request invalid' 'PM/Unit #n is out of service.'	The requested action is not valid when the node is out of service.
'RCC2 #n <unit #n> Request invalid' 'The standby reference is not suitable for sync'	The standby reference is not suitable for sync.
'RCC2 #n <unit #n> Request invalid'. 'Request is valid only with BITS sync source'	This command is valid only when the sync source is BITS.
'RCC2 #n Can't SWREF to SCND reference while revertive is on' 'Try Disabling the PRIM reference'	There is no point in performing the SWREF command while revertive is on because the SIGP immediately will return to the PRIM link. You can achieve the SWREF by disabling the primary link.
'RCC2 #n The SWREF command is valid per unit only when' 'the other unit is in HLDVR mode'	The units need always to sync off the same link. Therefore the SWREF command is valid per unit only when the other unit is in Holdover mode.
'RCC2 #n <unit #n>: Request submitted.'	The request is valid, waiting for response.
'RCC2 #n <unit #n> SwRef Passed'	The request is successfully performed.
'RCC2 #n <unit #n>: SwRef failed.'	The command failed check logs.

System action:

Switch the specified RCC2 clock to the standby link.

User action:

Type SwRef with the RCC2 clock unit(s) that need to be switched.

Command name: EnblRef

Command type

MENU.

Command target

SUPERNODE.

Command availability

NONRES.

Command description

The command Instructs the specified RCC2 clock to enable synchronization on the specified reference link.

Warning

N/A

Command syntax

EnblRef <Pm | Unit <0 | 1>> <Prim | Scnd | Both>.

Parameter definitions

Table 3-103 Command parameters

PARAMETER	VALUE	DEFINITION
PM	N/A	
unit	0,1	
PRIM	N/A	
SCND	N/A	
BOTH	N/A	

Responses and their explanations

Table 3-104 Responses & explanations

Responses	Explanations
'RCC2 #n <unit #n> Request invalid' 'PM/Unit #n is out of service.'	The requested action is not valid when the node is out of service.
'RCC2 #n <unit #n> Request invalid'. 'Request is valid only with BITS sync source'	This command is valid only when the sync source is BITS.
'RCC2 #n Request invalid' 'RCC2 #n <unit #n> Reference already enabled for sync.'	The EnblRef command is valid only when the link is disabled for sync.
'RCC2 #n <unit #n> Request submitted.'	The request is valid, waiting for response.
'RCC2 #n <unit #n>: Enabling sync on <Prim Scnd Both> link(s) passed.'	The request is successfully performed.
'RCC2 #n <unit #n>: Enabling sync on <Prim Scnd Both> link(s) failed.'	The request failed.

System action:

The shelf's clock enables synchronization on the specified link.

User action:

Type EnblRef with the referenced sync link(s) and enter.

Command name: DsblRef**Command type**

MENU.

Command target

SUPERNODE.

Command availability

NONRES.

Command description

The command Instructs the specified RCC2 clock to disable synchronization on the specified reference link.

Warning

Please refer to "Table 3-106 Responses & explanations" on page 261.

Command syntax

DsblRef <Pm | Unit <0 | 1>> <Prim | Scnd | Both>.

Parameter definitions

Table 3-105 Command parameters

PARAMETER	VALUE	DEFINITION
PM	N/A	
unit	0,1	
PRIM	N/A	
SCND	N/A	

Table 3-105 Command parameters

PARAMETER	VALUE	DEFINITION
BOTH	N/A	

Responses and their explanations**Table 3-106 Responses & explanations**

Responses	Explanations
'RCC2 #n <unit #n> Request invalid' 'PM/Unit #n is out of service.'	The requested action is not valid when the node is out of service.
'RCC2 #n <unit #n> Request invalid'. 'Request is valid only with BITS sync source'	This command is valid only when the sync source is BITS.
'RCC2 #n Request invalid' 'RCC2 #n <unit #n> Reference already disabled for sync.'	The DsblRef command is valid only when the link is enabled for sync.
'RCC2 #n <unit #n> This action will cause the Unit(s)' 'to enter Holdover state' Continue (Y/N).'	Disabling the requested link when the standby link is not in sync will cause the PM/UNIT to enter Holdover state.
'RCC2 #n <unit #n> Request submitted.'	The request is valid, waiting for response.
RCC2 #n <unit #n>: Disabling sync on <Prim Scnd Both> link(s) passed.	The request is successfully performed.
'RCC2 #n <unit #n>: Disabling sync on <Prim Scnd Both> link(s) failed.'	The request failed.

System action:

The shelf's clock disables synchronization on the specified link.

User action:

Type DsblRef with the referenced sync link(s) and enter.

Command name: Sync**Command type**

MENU.

Command target

SUPERNODE.

Command availability

NONRES

Command description

The command allows to the craftperson to alternate between the BITS sync source (P-side) and the NTKW sync source (C-side) for RCC2 shelves.

Warning

Please refer to “Table 3-108 Responses & explanations” on page 262.

Command syntax

Sync <Ntwk | Bits>.

Parameter definitions**Table 3-107 Command parameters**

PARAMETER	VALUE	DEFINITION
NTWK	N/A	
BITS	N/A	

Responses and their explanations**Table 3-108 Responses & explanations**

Response	explanation
'RCC2 #n Request invalid' 'PM/Unit #n is out of service.'	The requested action is not valid when the node is out of service.
'RCC2 #n Request invalid' 'RCC2 #n Already syncing to <NTWK/BITS>.'	The request is invalid. The shelf is already syncing to the specified source.
'RCC2 #n: Request submitted.'	The request is valid, waiting for response.
'RCC2 #n: Changing sync source to <NTWK/BITS> passed.'	Changing the sync source has succeeded.
'RCC2 #n: Changing sync source to <NTWK/BITS> failed.'	Changing the sync source has failed

System action:

Change sync source to the specified one.

User action:

Type Sync with the requested sync source (Ntwk/Bits).

Command name: QueryClk**Command type**

MENU.

Command target

SUPERNODE.

Command availability

NONRES.

Command description

The command gives an indication on the following issues:

- If the Revertive Switching bit is set or clear in table SYLNKINV. This bit indicate whether the PM's clocks will automatic switch back to the primary link when it become available again.
- The time of the most recent reference switch in each clock unit.
- Indication of the reason for the force state source.

Warning

N/A

Command syntax

QueryClk.

Parameter definitions

Table 3-109 Command parameters

PARAMETER	VALUE	DEFINITION
N/A		

Responses and their explanations

Table 3-110 Responses & explanations

Response	explanation
'QueryClk'	The request is performed.
'Reverting switching is ON/OFF.'	Indication whether the revert bit is set or clear.
'Forced state reasons:' 'Unit #n Manually invoked C-side Network sync.' 'Unit #n Manually enforced holdover.'	Explanation for the FRC state on the BITS level display.
'Last reference switch in Unit 0 was at: 1994/12/12 16:14:05.273'	Information of the last reference switch on Unit 0 clock.
'Last reference switch in Unit 1 was at: 1994/12/11 08:10:07.453'	Information of the last reference switch on Unit1 clock

System action:

Checking for the Revertive Switching bit in table SYLNKINV.

Checking for the last reference switch.

User action:

Type QueryClk.

Notes

N/A.

Examples

1. User -> Sync NTKW.

Response -> Rcc2 #n Request submitted.

Response -> Changing sync source to NTKW passed.

2. User -> SwRef PM

Response -> RCC2 #n Request submitted.

Response -> SwRef Passed

3. User -> EnblRef PM Prim

Response -> RCC2 #n Request invalid.

Request is valid only with BITS sync source.

4. User -> DsblRef Unit 1 Scnd.

Response -> RCC2 #n Request submitted.

Response -> RCC2 #n Disabling sync on Scnd reference Passed

5. User -> QueryClk.

QueryClk:

Reverting switching is ON

Last reference switch in Unit 0 was at: 1994/12/12 16:15:05.324

Last reference switch in Unit 1 was at: 1994/12/10 10:10:23.764

Forced state reasons:

Unit 0 Manually enforced Holdover state.

Alarms

N/A

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Directories

There is one directory affected by this feature: **CARRDIR**.

Table of new/modified directories

Table 3-111 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
CARRDIR	CHANGED			

Accessing directory: CARRDIR.

To access

Command used to enter this directory: Mapci;Mtc;trks;carrier.

To return to CI

Command used to exit this directory to CI: quit all.

Commands

N/A

Alarms

N/A

Display information.

CARRIER MAP level

The CARRIER MAP level enables the craftsperson to distinguish between the office timing links and the BITS links by using the SITE field. The BITS DS1 links provide the active and standby reference sources for the RCC2. Please refer to Figure 1: “CARRIER MAP level after posting timing links”.

Figure 3-30 CARRIER MAP level after posting timing links¹

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL		
.	.	.	.	1LCME	.	.	.	.	.		
C											
CARRIER											
0 Quit_	CLASS	ML	OS	ALARM	SYSB	MANB	UNEQ	OFFL	CBSY	PBSY	INSV
2 Post_	TRUNKS	0	0	0	0	2	0	58	0	0	4
3	REMOTE	0	0	4	0	57	0	8	0	7	20
4	TIMING	0	0	0	0	0	0	0	0	0	4
5 Loop_											
6 Tst_	NO CLASS	SITE	PM	CKT	D	ALARM	SLIP	STATE	TLINK	MODE	
7 Bsy_	0 TIMING	HOST	DTC	3 2	C		0	INSV	0	ACTIVE	
8 RTS_	1 TIMING	HOST	DTC	3 6	C		0	INSV	1	STANDBY	
9 OffL_	2 TIMING	REM1	RCC2	2 0	C		0	INSV	22	STANDBY	
10 DispOpt_	3 TIMING	REM1	RCC2	2 8	C		0	INSV	23	ACTIVE	
11 Disp_											
12 Next_											
13	POSTED BY CONDITION : TIMING										
14 Detail_											
15											
16											
17											
18											
MAP1											
ime 12:00>											

¹This figure depicts a “slave office” configuration with 2 incoming office timing links off a DTC, and one RCC2 with a BITS interface.

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Directories

There is one directory affected by this feature: **CARRDIR**.

Table of new/modified directories

Table 3-112 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
CARRDIR	CHANGED			

Accessing directory: CARRDIR.

To access

Command used to enter this directory: Mapci;Mtc;trks;carrier.

To return to CI

Command used to exit this directory to CI: quit all.

Commands

N/A

Alarms

N/A

CARRIER MAP level

The CARRIER MAP level enables the craftsperson to distinguish between the office timing links and the BITS links by using the SITE field. The BITS DS1 links provide the active and standby reference sources for the RCC2. Please refer to Figure 1: “CARRIER MAP level after posting timing links”.

Figure 3-31 CARRIER MAP level after posting timing links¹

CM	MS	IOD	Net	PM	CCS	Lns	Trks	Ext	APPL		
.	.	.	.	1LCME	.	.	.	.	.		
C											
CARRIER											
0 Quit_	CLASS	ML	OS	ALARM	SYSB	MANB	UNEQ	OFFL	CBSY	PBSY	INSV
2 Post_	TRUNKS	0	0	0	0	2	0	58	0	0	4
3	REMOTE	0	0	4	0	57	0	8	0	7	20
4	TIMING	0	0	0	0	0	0	0	0	0	4
5 Loop_											
6 Tst_	NO CLASS	SITE	PM	CKT	D	ALARM	SLIP	STATE	TLINK	MODE	
7 Bsy_	0 TIMING	HOST	DTC	3 2	C		0	INSV	0	ACTIVE	
8 RTS_	1 TIMING	HOST	DTC	3 6	C		0	INSV	1	STANDBY	
9 OffL_	2 TIMING	REM1	RCC2	2 0	C		0	INSV	22	STANDBY	
10 DispOpt_	3 TIMING	REM1	RCC2	2 8	C		0	INSV	23	ACTIVE	
11 Disp_											
12 Next_											
13	POSTED BY CONDITION : TIMING										
14 Detail_											
15											
16											
17											
18											
MAP1											
ime 12:00>											

¹This figure depicts a “slave office” configuration with 2 incoming office timing links off a DTC, and one RCC2 with a BITS interface.

AN1178mm.aa04**Directories**

Not Applicable

Table of new/modified directories**Table 3-113 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

TRAVER, QCM, WCM

Table of New/modified commands**Table 3-114 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	CHANGED		
QCM	CHANGED		
WCM	CHANGED		

Command name: TRAVER

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAVER.. TRAnslation VERification tool used to display the path of the specified call through translation tables.

Currently, the TRAVER command supports a maximum dialed digit count of 24. Trying to insert more than 24 will yield the error message INVALID DIGITS IN CALLED DR. This activity changes the maximum from 24 to 30. Also, TRAVER currently does not display more than 24 digits to outpulse. This activity changes the maximum from 24 to 30.

Warning

No Change

Command syntax

No Change

Parameter definitions

Table 3-115 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Explanation:

System action:

User action:

Notes**Examples**

Before this activity, the following TRAVER example produced an error message because the dialed digit count is greater than 24.

>traver l 6215955 1010111011421234567890123 b

INVALID DIGITS IN CALLED DR

This activity supports a dialed digit count of up to 30 as the same TRAVER example shows below.

```
>traver l 6215955 1010111011421234567890123 b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC LATA1 0
NIL NIL 00 Y RESGRP 0 2 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P621 ( 1) ( 0) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 1010111 1010111 EA DD 7 P P111 CAR1 Y OFRT 889 8 25 Y
. . TABLE OFRT
. . 889 CND EA INTNL SK 3
. . S D OGEACAR1
. . S D ISUP2WCAR1
. . CND ALWAYS SK 2
. . N D OGEACAR1 15 D121 N
. . N D ISUP2WCAR1 15 D121 N
. . EXIT TABLE OFRT
. TABLE STDPRTCT
. P111 ( 1) ( 0) 0
. . SUBTABLE STDPRTWARNING: CHANGES IN TABLE STDPRT
MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. . 011 011 EA DD 3 T IN CAR1 N
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE CCTR
42 T 042 7 15 T OFRT 887 Y
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
TABLE OFRT
887 CND EA INTNL SK 2
S D LNTOPS
```

```

      CND ALWAYS SK 1
      N D LNTOPS 0 1 N
EXIT TABLE OFRT
OVERLAP CARRIER SELECTION (OCS) APPLIES
TABLE OCCINFO
CAR1 0111 TRANS Y Y Y Y N N N Y Y Y Y LONG 14 FGRPD Y N Y
N N
N N N Y N N N
TABLE EASAC
TUPLE NOT FOUND
Using Equal Access (EA) route  OFRT 889 from Pretranslation
TABLE OFRT
889 CND EA INTNL SK 3
S D OGEACAR1
S D ISUP2WCAR1
CND ALWAYS SK 2
N D OGEACAR1 15 D121 N
N D ISUP2WCAR1 15 D121 N
EXIT TABLE OFRT
+++ TRAVER: SUCCESSFUL CALL TRACE +++

```

DIGIT TRANSLATION ROUTES

1 OGEACAR1	D121	ST
2 ISUP2WCAR1	D121	ST

TREATMENT ROUTES. TREATMENT IS: GNCT

1 T120

+++ TRAVER: SUCCESSFUL CALL TRACE +++

Command name: QCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Query Call Memory (QCM) CI command displays the contents of the Call memory associated with a RES line. The QCM CI command is enhanced by this activity to display up to a 30 digit number for the Outgoing Call Memory (OCM) field "Called DN". Presently, the QCM command displays up to a 24 digit number for OCM field "Called DN".

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Explanation:**System action:****User action:****Notes**

None

Examples

An example of the QCM output is provided below. In this example, 25 dialed digits are stored in the OCM (reflected by field "Called DN").

> QCM 6211234 F

```
-----  
CALL MEMORY DISPLAY FOR DN: 6211234 LEN: HOST 01 1 02 21  
Incoming Call Memory -  
    Time of call: 1994/01/01 00:00:00.000 THU.  
    Calling DN: UNAVAILABLE  
    Network:
```

Originating Address Type: (UNKNOWN)
Interworking Encountered: NO
Originating DN PRI: UNSUPPRESSED
Originating Name PRI: UNSUPPRESSED
Long Distance Call: NO
Intraoffice call: YES
Group Intercom: NO
Call Waiting: NO
Display: ALLOWED
COT Already Activated: NO

Outgoing Call Memory -
Called DN: 1010999011431234567890123
Prefix Count: 10
DN Unusable: YES
Intraoffice call: NO
Destination DN PRI: UNSUPPRESSED
Destination Name PRI: UNSUPPRESSED
Call Forwarded: NO
Group Intercom: NO
CNDB Features: CNDB_NOT_ACTIVE
CNAB FEATURES: CNAB_NOT_ACTIVE
Name/DN Block Features: NAME_DN_BLK_FEATS_NOT_ACTIVE
Display: ALLOWED

Command name: WCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Write Call Memory (WCM) CI command is used to write data into the Call Memory for a RES line. The WCM CI command is enhanced by this activity to write up to a 30 digit number into the Outgoing Call Memory (OCM) field "Called DN". Presently, the WCM CI command can write up to a 24 digit number into OCM field "Called DN".

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Explanation:**System action:****User action:****Notes**

None

Examples

An example using the WCM CI command to write a 25 digit number into field “Called DN” of the OCM is shown below.

```
>wcm
<Directory Number> or <Line Equipment Number>:
>6210048
Timestamp 12mSec units (1=SetCurrent): 0
>
Clg agent (U, D, L, C, T_ICMB): U
>
NETWORK      :
>
Originating line type: 0
>
Orig DN PRI   : N
>
Orig Name PRI : N
>
Long Distance : N
```

```

>
Interworking : N
>
Intraoffice : Y
>
Group Intercom : N
>
Call Waiting : N
>
Disp Disallowed: N
>
Cld agent (U, D, L, C): D
>
Cld agent DIGITS:
>10109990114441234567890123
Prefix Count : 0
>DN Unreliable : N
>
Intraoffice : Y

>
Dest Dn PRI : N
>
Dest Name PRI : N
>
Call Forwarded : N
>
Group Intercom : N
>
CNDB Features : CNDB_NOT_ACTIVE
>
CNAB Features : CNAB_NOT_ACTIVE
>
NAME/DN Block Features : NAME_DN_BLK_FEATS_NOT_ACTIVE
>
Disp Disallowed: N
>
ICMB UPDATED
OCMB UPDATED
-----
END WCM

```

Alarms

Not Applicable

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN1197mm.aa04**Directories**

Not Applicable

Table of new/modified directories**Table 3-116 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands

TRAVER, QCM, WCM

Table of New/modified commands**Table 3-117 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	CHANGED		
QCM	CHANGED		
WCM	CHANGED		

Command name: TRAVER

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAVER.. TRAnslation VERification tool used to display the path of the specified call through translation tables.

Currently, the TRAVER command supports a maximum dialed digit count of 24. Trying to insert more than 24 will yield the error message INVALID DIGITS IN CALLED DR. This activity changes the maximum from 24 to 30. Also, TRAVER currently does not display more than 24 digits to outpulse. This activity changes the maximum from 24 to 30.

Warning

No Change

Command syntax

No Change

Parameter definitions

Table 3-118 Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Explanation:

System action:

User action:

Notes**Examples**

Before this activity, the following TRAVER example produced an error message because the dialed digit count is greater than 24.

>traver l 6215955 1010111011421234567890123 b

INVALID DIGITS IN CALLED DR

This activity supports a dialed digit count of up to 30 as the same TRAVER example shows below.

```
>traver l 6215955 1010111011421234567890123 b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC LATA1 0
NIL NIL 00 Y RESGRP 0 2 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P621 ( 1) ( 0) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 1010111 1010111 EA DD 7 P P111 CAR1 Y OFRT 889 8 25 Y
. . TABLE OFRT
. . 889 CND EA INTNL SK 3
. . S D OGEACAR1
. . S D ISUP2WCAR1
. . CND ALWAYS SK 2
. . N D OGEACAR1 15 D121 N
. . N D ISUP2WCAR1 15 D121 N
. . EXIT TABLE OFRT
. TABLE STDPRTCT
. P111 ( 1) ( 0) 0
. . SUBTABLE STDPRTWARNING: CHANGES IN TABLE STDPRT
MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. . 011 011 EA DD 3 T IN CAR1 N
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE CCTR
42 T 042 7 15 T OFRT 887 Y
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
TABLE OFRT
887 CND EA INTNL SK 2
S D LNTOPS
```

CND ALWAYS SK 1
N D LNTOPS 0 1 N
EXIT TABLE OFRT
OVERLAP CARRIER SELECTION (OCS) APPLIES
TABLE OCCINFO
CAR1 0111 TRANS Y Y Y Y N N N Y Y Y Y LONG 14 FGRPD Y N Y
N N
N N N Y N N N
TABLE EASAC
TUPLE NOT FOUND
Using Equal Access (EA) route OFRT 889 from Pretranslation
TABLE OFRT
889 CND EA INTNL SK 3
S D OGEACAR1
S D ISUP2WCAR1
CND ALWAYS SK 2
N D OGEACAR1 15 D121 N
N D ISUP2WCAR1 15 D121 N
EXIT TABLE OFRT
+++ TRAVER: SUCCESSFUL CALL TRACE +++

DIGIT TRANSLATION ROUTES

1 OGEACAR1 D121 ST
2 ISUP2WCAR1 D121 ST

TREATMENT ROUTES. TREATMENT IS: GNCT

1 T120

+++ TRAVER: SUCCESSFUL CALL TRACE +++

Command name: QCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Query Call Memory (QCM) CI command displays the contents of the Call memory associated with a RES line. The QCM CI command is enhanced by this activity to display up to a 30 digit number for the Outgoing Call Memory (OCM) field “Called DN”. Presently, the QCM command displays up to a 24 digit number for OCM field “Called DN”.

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Response

Explanation:

System action:

User action:

Notes

None

Examples

An example of the QCM output is provided below. In this example, 25 dialed digits are stored in the OCM (reflected by field “Called DN”).

> QCM 6211234 F

CALL MEMORY DISPLAY FOR DN: 6211234 LEN: HOST 01 1 02 21

Incoming Call Memory -

Time of call: 1994/01/01 00:00:00.000 THU.

Calling DN: UNAVAILABLE

Network:

Originating Address Type: (UNKNOWN)

Interworking Encountered: NO

Originating DN PRI: UNSUPPRESSED

Originating Name PRI: UNSUPPRESSED

Long Distance Call: NO

Intraoffice call: YES

Group Intercom: NO

Call Waiting: NO

Display: ALLOWED

COT Already Activated: NO

Outgoing Call Memory -

Called DN: 1010999011431234567890123

Prefix Count: 10

DN Unusable: YES

Intraoffice call: NO

Destination DN PRI: UNSUPPRESSED

Destination Name PRI: UNSUPPRESSED

Call Forwarded: NO

Group Intercom: NO

CNDB Features: CNDB_NOT_ACTIVE

CNAB FEATURES: CNAB_NOT_ACTIVE

Name/DN Block Features: NAME_DN_BLK_FEATS_NOT_ACTIVE

Display: ALLOWED

Command name: WCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Write Call Memory (WCM) CI command is used to write data into the Call Memory for a RES line. The WCM CI command is enhanced by this activity to write up to a 30 digit number into the Outgoing Call Memory (OCM) field "Called DN". Presently, the WCM CI command can write up to a 24 digit number into OCM field "Called DN".

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Explanation:

System action:

User action:

Notes

None

Examples

An example using the WCM CI command to write a 25 digit number into field "Called DN" of the OCM is shown below.

```
>wcm
<Directory Number> or <Line Equipment Number>:
>6210048
Timestamp 12mSec units (1=SetCurrent): 0
>
Clg agent (U, D, L, C, T_ICMB): U
>
NETWORK      :
```

```
>
Originating line type: 0
>
Orig DN PRI   : N
>
Orig Name PRI : N
>
Long Distance : N
>
Interworking  : N
>
Intraoffice   : Y
>
Group Intercom : N
>
Call Waiting  : N
>
Disp Disallowed: N
>
Cld agent (U, D, L, C): D
>
Cld agent DIGITS:
>10109990114441234567890123
Prefix Count  : 0
>DN Unreliable : N
>
Intraoffice   : Y

>
Dest Dn PRI   : N
>
Dest Name PRI : N
>
Call Forwarded : N
>
Group Intercom : N
>
CNDB Features : CNDB_NOT_ACTIVE
>
CNAB Features : CNAB_NOT_ACTIVE
>
NAME/DN Block Features : NAME_DN_BLK_FEATS_NOT_ACTIVE
>
```

Disp Disallowed: N

>

ICMB UPDATED

OCMB UPDATED

END WCM

Alarms

Not Applicable

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN1226mm.ab01**Directories**

No directories have been changed.

Table of new/modified directories**Table 3-119 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:

To access

To return to CI

Commands**Table of New/modified commands****Table 3-120 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
SWACT	Changed		LGCDIR, RCCDIR

Command name:

SwAct

Command type

Menu

Command target

SuperNode, and BRISC

Command availability

RES

Command description

The SwAct command is used to cause an XPM (eXtended Peripheral Module) to SwAct (Switch Activity) from one unit to the other.

The syntax of the SwAct command has not changed with this feature. The response of the command has been modified to allow the craftsperson to differentiate between the type of SwAct that occurred on the XPM.

Warnings

When the craftsperson enters a SwAct command at the MAP and an INSV Cold SwAct is to be performed, the following warnings may be displayed:

An ISTB condition exists on this PM.

A Warm SwAct cannot be performed until the ISTB condition is cleared. The command “SwAct COLD” can be used to perform an INSV Cold SwAct.

An INSV Cold SwAct will be performed
This action will temporarily inhibit call processing on this XPM.

An INSV Cold SwAct will be performed
This action will temporarily inhibit call processing on this XPM and its Subtending Nodes.

Confirmation prompts may or may not follow these displays.

The purpose of the warning is to inform the user that an INSV Cold Swact will be performed on an XPM in response to the command entered. The warning exists prior to this feature. This feature adds the type of Cold SwAct to be performed.

Command syntax

As stated above, the syntax of the SwAct command is unchanged. It is only displayed here for completeness.

SWACT: Switch unit activity.

NOW parameter will execute an immediate SWACT.

TEST parameter will run OOS test when the newly inactive unit is RTSed.

ALL parameter will execute SWACT on all PMs in the post set of the same PM type as the PM displayed on the MAP.

FORCE parameter will override the SwAct decision of the SwAct Controller.

COLD parameter will execute a COLD switch of activity.

DUPLEX parameter will keep the newly inactive unit in service.

Parms: [<NOW> {NOW}]

[<TEST> {TEST}]

[<ALL> {ALL}]

[<FORCE> {FORCE}]

[<COLD> {COLD}]

[<DUPLEX> {DUPLEX}]

Responses

The new response generated is the prompt containing the explanation that the SwAct is an INSV Cold SwAct and that call processing will be temporarily inhibited on the XPM being SwActed.

Response

LTC 0 An INSV Cold SwAct will be performed.

This action will temporarily inhibit
call processing on this XPM.

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

The Cold SwAct command was entered from the MAPCI; MTC; PM; POST level of the MAP.

The response is visible on SUPERNODE and BRISC computing engines.

System action:

If the user enters “YES” or “Y” in response to the prompt for an INSV Cold SwAct, the system performs a Cold SwAct keeping the node and any subtending p-side nodes inservice. Prior to this feature, XPM node and all subtending p-side nodes were taken out of service. Individual units are still BSY’d and RTS’d.

If the user enters “NO” or “N” in response to the prompt for an INSV Cold SwAct, the SwAct is not performed.

User action:

The user should respond to the YES/NO prompt according to whether the SwAct to be performed is desirable.

Notes

The INSV Cold SwAct occurs only when all of the following are true:

- The SwAct type to be performed is XPM Manual Cold SwAct.
- The XPM being SwActed is supported by this feature, AN1226. Please see the Limitations/Restrictions” section of the FN portion of this document for a list of supported XPMs.

For SwAct types and XPM types not supported by this feature, as OOS (out of service) Cold SwAct will occur, which is identical to the cold SwAct prior to this feature.

- For supported XPMs, there is no way to perform an OOS Cold SwAct directly. To realize the same result, the following actions would be required:
 - i. BSY PM
 - ii. RTS UNIT x (where x is the inactive unit prior to step i.
 - iii. RTS UNIT y (where y is the active unit prior to step i.

Examples

Example 1 shows a cold SwAct command entered on a supported XPM. Example 2 shows a cold SwAct command entered on an XPM for which INSV cold SwAct is *not* supported.

EXAMPLE 1:

```
>mapci;mtc;pm;post ltc 0
>swactcold
LTC 0      An INSV Cold SwAct will be performed.
           This action will temporarily inhibit
           call processing on this XPM.
Please confirm ("YES", "Y", "NO", or "N"):
>no
```

EXAMPLE 2:

```
>mapci;mtc;pm;post ltci 0
>swact cold
LTCI 0     An OOS Cold SwAct will be performed.
           This action will temporarily inhibit
           call processing on this XPM.
Please confirm ("YES", "Y", "NO", or "N"):
>yes
>swact passed
```

Command name:

RTS NODATASYNC

Command type

Menu

Command target

SuperNode, and BRISC

Command availability

RES

Command description

The RTS NODATASYNC command is used to return an inactive unit on a XPM (eXtended Peripheral Module) to service without initiating a data transfer between units. This command is normally used by maintenance personnel prior to a cold SwAct command to eliminate suspected data corruptions.

This feature, AN1226, does not make any changes to the SWACT command. It adds an informational warning when the SWACT command is entered.

Warning

There are no warnings associated with the change.

Command syntax

There are no changes to the syntax of the RTS NODATASYNC command. It is displayed here for completeness.

SWACT: Switch unit activity.

RTS: Return to service the whole PM, a unit, a PSIDE link or a CMR card.

NODATASYNC parameter will send static data to the inactive unit. PM will not attempt data sync after the unit is returned to service. This parm does not apply to PM equipped with small load.

ALL parameter will execute RTS on all PMs in the post set of the same PM type as the PM displayed on the MAP.

SYSB <ALL> parameter is the same as RTS with parameter FORCE NOWAIT <ALL>. The SYSB parameter will RTS the

POSTed

PM(s) which is/are SYSB.

The PM can have from 1 to 64 pside links depending on the given PM architecture.

Parms: <DEVICE> {UNIT <UNIT_NO> {0 TO 1}

[<NODATASYNC> {NODATASYNC}]

[<CMR> {CMR}],

PM [<CMR> {CMR}],
LINK <PSIDE_LINK> {0 TO 63},
ACTIVE,
INACTIVE [<NODATASYNC>
{NODATASYNC}],
SYSB}
[<FORCE> {FORCE}]
[<NOWAIT> {NOWAIT}]
[<ALL> {ALL}]

Responses

For supported XPMs, the new response generated is the prompt containing the explanation that the INSV Cold SwAct should be performed on the XPM in question using the SWACT COLD command.

Response

When the craftsperson enters the RTS NODATASYNC command at the MAP and the XPM supports INSV Cold SwAct, the following warning is displayed if the command is executed on a supported XPM:

RTS NODATASYNC has been incorporated into the
INSV Cold SwAct and is no longer a prerequisite
action prior to Cold SwAct.
If a SwAct is intended , enter N, and
RTS this unit, followed by a SwAct Cold.
Otherwise, Static data will be sent. Data sync will
not be attempted after the inactive unit is RTSed.
Please confirm ("YES", "Y", "NO", or "N"):

The purpose of the warning is to inform the user that an INSV Cold Swact should be performed in place of the RTS NODATASYNC command that was entered. This warning is only output if the XPM in question supports the INSV Cold SwAct. For a list of supported XPMs, please consult the FN section of this document.

Explanation:

The RTS NODATASYNC command was entered from the MAPCI; MTC; PM; POST level of the MAP. INSV Cold SwAct is supported on XPM.

The response is visible on SUPERNODE and BRISC computing engines.

System action:

If the user enters “YES” or “Y” in response to the prompt, the system performs the RTS NODATASYNC that was requested, after static data has been sent to the unit.

If the user enters “NO” or “N” in response to the prompt, the RTS NODATASYNC is not performed, and the user must manually enter an RTS command to bring the OOS unit back into service.

User action:

The user should respond to the YES/NO prompt according to the reason for the command invocation. If this command was issued to deal with a suspected XPM corruption problem, then the command is unnecessary as the INSV Cold SwAct performs the equivalent actions with the difference being that the INSV SwAct is more thorough. To see exactly how the INSV Cold SwAct is more thorough, please consult the FN section of AN1226.

Notes

For a list of supported XPMs, please see the Limitations/Restrictions” section of the FN portion of this document.

Examples

Example 1 and 2 show the use of the RTS NODATASYNC command on a supported and unsupported XPM.

EXAMPLE 1:

>mapci;mtc;pm;post ltc 0

>RTS INACTIVE NODATASYNC

LTC 0 Unit 0 RTS NODATASYNC has been incorporated into the
INSV Cold SwAct for this XPM.

If a SwAct is intended , enter NO now,

RTS INACTIVE FORCE, then SWACT COLD to keep

the

XPM and any P-side nodes in-service during the

SwAct. Otherwise, Static data will be sent.

Data sync will not be attempted after the

inactive unit is RTSed.

Please confirm ("YES", "Y", "NO", or "N"):

>no

EXAMPLE 2:

>mapci;mtc;pm;post ltc 0

>RTS INACTIVE NODATASYNC

LTC 0 Unit 0 Static data will be sent. Data sync will not be
attempted after the inactive unit is RTSed.

Please confirm ("YES", "Y", "NO", or "N"):

>yes

Alarms

Not Applicable

AN1246mm.aa04**Directories**

Not Applicable

Table of new/modified directories**Table 3-121 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Accessing directory:**To access****To return to CI****Commands**

TRAVER, QCM, WCM

Table of New/modified commands**Table 3-122 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	CHANGED		
QCM	CHANGED		
WCM	CHANGED		

Command name: TRAVER**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAVER.. TRAnslation VERification tool used to display the path of the specified call through translation tables.

Currently, the TRAVER command supports a maximum dialed digit count of 24. Trying to insert more than 24 will yield the error message INVALID DIGITS IN CALLED DR. This activity changes the maximum from 24 to 30. Also, TRAVER currently does not display more than 24 digits to outpulse. This activity changes the maximum from 24 to 30.

Warning

No Change

Command syntax

No Change

Parameter definitions

Table 3-123 TRAVER Parameter Definitions

PARAMETER	VALUE	DEFINITION

Responses

Explanation:

System action:

User action:

Notes**Examples**

Before this activity, the following TRAVER example produced an error message because the dialed digit count is greater than 24.

>traver l 6215955 1010111011421234567890123 b

INVALID DIGITS IN CALLED DR

This activity supports a dialed digit count of up to 30 as the same TRAVER example shows below.

```
>traver l 6215955 1010111011421234567890123 b
TABLE LINEATTR
0 1FR NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC LATA1 0
NIL NIL 00 Y RESGRP 0 2 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE OFCVAR
AIN_OFFICE_TRIGGRP NIL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE STDPRTCT
P621 ( 1) ( 0) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 1010111 1010111 EA DD 7 P P111 CAR1 Y OFRT 889 8 25 Y
. . TABLE OFRT
. . 889 CND EA INTNL SK 3
. . S D OGEACAR1
. . S D ISUP2WCAR1
. . CND ALWAYS SK 2
. . N D OGEACAR1 15 D121 N
. . N D ISUP2WCAR1 15 D121 N
. . EXIT TABLE OFRT
. TABLE STDPRTCT
. P111 ( 1) ( 0) 0
. . SUBTABLE STDPRTWARNING: CHANGES IN TABLE STDPRT
MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. . 011 011 EA DD 3 T IN CAR1 N
. SUBTABLE AMAPRT
. KEY NOT FOUND
. DEFAULT VALUE IS: NONE OVRNONE N
TABLE CCTR
42 T 042 7 15 T OFRT 887 Y
AIN Info Collected TDP: no subscribed trigger.
AIN Info Analyzed TDP: no subscribed trigger.
TABLE OFRT
887 CND EA INTNL SK 2
S D LNTOPS
```

CND ALWAYS SK 1
N D LNTOPS 0 1 N
EXIT TABLE OFRT
OVERLAP CARRIER SELECTION (OCS) APPLIES
TABLE OCCINFO
CAR1 0111 TRANS Y Y Y Y N N N Y Y Y Y LONG 14 FGRPD Y N Y
N N
N N N Y N N N
TABLE EASAC
TUPLE NOT FOUND
Using Equal Access (EA) route OFRT 889 from Pretranslation
TABLE OFRT
889 CND EA INTNL SK 3
S D OGEACAR1
S D ISUP2WCAR1
CND ALWAYS SK 2
N D OGEACAR1 15 D121 N
N D ISUP2WCAR1 15 D121 N
EXIT TABLE OFRT
+++ TRAVER: SUCCESSFUL CALL TRACE +++

DIGIT TRANSLATION ROUTES

1 OGEACAR1 D121 ST
2 ISUP2WCAR1 D121 ST

TREATMENT ROUTES. TREATMENT IS: GNCT

1 T120

+++ TRAVER: SUCCESSFUL CALL TRACE +++

Command name: QCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Query Call Memory (QCM) CI command displays the contents of the Call memory associated with a RES line. The QCM CI command is enhanced by this activity to display up to a 30 digit number for the Outgoing Call Memory (OCM) field "Called DN". Presently, the QCM command displays up to a 24 digit number for OCM field "Called DN".

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Explanation:

System action:

User action:

Notes

None

Examples

An example of the QCM output is provided below. In this example, 25 dialed digits are stored in the OCM (reflected by field "Called DN").

> QCM 6211234 F

```
-----  
CALL MEMORY DISPLAY FOR DN: 6211234 LEN: HOST 01 1 02 21  
Incoming Call Memory -  
    Time of call: 1994/01/01 00:00:00.000 THU.  
    Calling DN: UNAVAILABLE  
    Network:
```

Originating Address Type: (UNKNOWN)
Interworking Encountered: NO
Originating DN PRI: UNSUPPRESSED
Originating Name PRI: UNSUPPRESSED
Long Distance Call: NO
Intraoffice call: YES
Group Intercom: NO
Call Waiting: NO
Display: ALLOWED
COT Already Activated: NO

Outgoing Call Memory -
Called DN: 1010999011431234567890123
Prefix Count: 10
DN Unusable: YES
Intraoffice call: NO
Destination DN PRI: UNSUPPRESSED
Destination Name PRI: UNSUPPRESSED
Call Forwarded: NO
Group Intercom: NO
CNDB Features: CNDB_NOT_ACTIVE
CNAB FEATURES: CNAB_NOT_ACTIVE
Name/DN Block Features: NAME_DN_BLK_FEATS_NOT_ACTIVE
Display: ALLOWED

Command name: WCM

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The Write Call Memory (WCM) CI command is used to write data into the Call Memory for a RES line. The WCM CI command is enhanced by this activity to write up to a 30 digit number into the Outgoing Call Memory (OCM) field "Called DN". Presently, the WCM CI command can write up to a 24 digit number into OCM field "Called DN".

Warning

None

Command syntax

No Change

Parameter definitions

No Change

Responses

No Change

Explanation:**System action:****User action:****Notes**

None

Examples

An example using the WCM CI command to write a 25 digit number into field “Called DN” of the OCM is shown below.

```
>wcm
<Directory Number> or <Line Equipment Number>:
>6210048
Timestamp 12mSec units (1=SetCurrent): 0
>
Clg agent (U, D, L, C, T_ICMB): U
>
NETWORK      :
>
Originating line type: 0
>
Orig DN PRI   : N
>
Orig Name PRI : N
>
Long Distance : N
```

```
>
Interworking : N
>
Intraoffice : Y
>
Group Intercom : N
>
Call Waiting : N
>
Disp Disallowed: N
>
Cld agent (U, D, L, C): D
>
Cld agent DIGITS:
>10109990114441234567890123
Prefix Count : 0
>DN Unreliable : N
>
Intraoffice : Y

>
Dest Dn PRI : N
>
Dest Name PRI : N
>
Call Forwarded : N
>
Group Intercom : N
>
CNDB Features : CNDB_NOT_ACTIVE
>
CNAB Features : CNAB_NOT_ACTIVE
>
NAME/DN Block Features : NAME_DN_BLK_FEATS_NOT_ACTIVE
>
Disp Disallowed: N
>
ICMB UPDATED
OCMB UPDATED
-----
END WCM
```

Alarms

Not Applicable

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN1278mm.aa15**Directories**

PROGDIR and BCSMON are directories affected by this feature.

Table of new/modified directories**Table 3-124 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
BCSMON	CHANGED	N/A	SUPERNODE, BRISC	RES
PROGDIR	CHANGED	N/A	SUPERNODE, BRISC	RES

Accessing directory: BCSMON**To access**

Type BCSMON.

To return to CI

Type QUIT.

Accessing directory: PROGDIR**To access**

The PROGDIR directory is accessed automatically upon logging into a MAP terminal.

To return to CI

N/A.

Commands

Table of New/modified commands

Table 3-125 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
COUNT	CHANGED	N/A	BCSMON
EQPCOUNTS	CHANGED	N/A	BCSMON
ALMSTAT	CHANGED	N/A	PROGDIR
QDN	CHANGED	N/A	PROGDIR
QDNWRK	CHANGED	N/A	PROGDIR
QLEN	CHANGED	N/A	PROGDIR
QLENWRK	CHANGED	N/A	PROGDIR
QLOAD	CHANGED	N/A	PROGDIR

The above command functions are not changed. The modifications are to add the new MBS II sets.

Command name: COUNT

Command type

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability

Command description

COUNT is used for counting various switch equipments.

Warning

N/A

Command syntax

The command syntax is not changed.

Under BCSMON type in:

COUNT

Parameter definitions

there is no parameter for COUNT.

Please refer to the NTP 297-1001-8200 Nonmenu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: EQPCOUNTS

Command type

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability

Command description

EQPCOUNTS displays the switch equipment counts which was counted by the COUNT command.

Warning

N/A

Command syntax

The command syntax is not changed.

Under BCSMON type in:

EQPCOUNTS (| <OPTION> {ALL} |)

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8200 Nonmenu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: ALMSTAT**Command type**

MENU command

Command target

SUPERNODE, BRISC

Command availability**Command description**

The ALMSTAT command is used for three purposes:

Query the alarm system of the LNS subsystem and display the status of alarms in the full switch by type of alarm.

Display all or selected alarms at specified units in the host or remote sites.

Change the thresholds of the alarm classes in the full switch.

Warning

N/A

Command syntax

The command syntax is not changed.

MAPCI;MTC;LNS;LTP;ALMSTAT

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8215 Menu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: QDN**Command type**

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability**Command description**

QDN is used for querying a DN (Directory Number).

Warning

N/A

Command syntax

The command syntax is not changed.

QDN DN

Please refer to the NTP 297-1001-8202 Nonmenu Commands Reference Manual for a complete listing of the command with all its parameters.

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8202 Menu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: QDNWRK**Command type**

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability**Command description**

QDNWRK is used to produce a detailed or summary listing of software assigned to a specific range of directory numbers (DNs) or all DN's.

Warning

N/A

Command syntax

The command syntax is not changed.

QDNWRK <DIRECTORY NUMBER RANGE>
<LCC><OPTION><SUMMARY OR DETAIL>

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8202 Menu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: QLEN**Command type**

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability**Command description**

QLEN is used for querying a LEN (Line Equipment Number).

Warning

N/A

Command syntax

The command syntax is not changed.

QLEN LEN/DN

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8202 Nonmenu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: QLENWRK**Command type**

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability**Command description**

QLENWRK is used for obtaining a detailed or summary listing of working LENS (hardware assigned, software assigned).

Warning

N/A

Command syntax

The command syntax is not changed.

QLENWRK <LINEMODULE RANGE><LINE DRAWER RANGE>
<LCC><OPTION><SUMMARY OR DETAIL>

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8202 Nonmenu Commands Reference Manual for a complete listing of the command with all its parameters.

Command name: QLOAD**Command type**

NON-MENU command

Command target

SUPERNODE, BRISC

Command availability**Command description**

QLOAD is used to obtain a summary of LEN assignments by LCC.

Warning

N/A

Command syntax

The command syntax is not changed.

QLOAD <LINE MODULE RANGE><LINE DRAWER
RANGE><LINE CLASS CODE>

Parameter definitions

No changes.

Please refer to the NTP 297-1001-8202 Nonmenu Commands Reference Manual for a complete listing of the command with all its parameters.

Responses

No changes.

Response**Explanation:**

There are no changes on the responses except the modifications will make the MBS II templates visible on all the associated MM commands.

System action:

No changes

User action:

No changes

Notes

None

Examples

In a DMS-100 office (under BCSMON prompt):

>COUNT

>EQPCOUNTS

In a DMS-100 office (under CI prompt):

>MAPCI;MTC;LNS;LTP;ALMSTAT

In a DMS-100 office (under CI prompt):

>QDN 6210061

>QDNWRK R 6210061 6210065 **M5008** (CWT) \$ S

>QLEN 0 0 0 27

>QLENWRK R HOST 00 0 HOST 00 0 R (0) (1)\$ **M5216** (CWT)\$ S

>QLOAD R HOST 00 0 HOST 00 0 R (0) (1)\$ **M5316**

Alarms

None

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AN1321mm.aa13

Directories

The SODIR directory is affected by this feature.

Table of new/modified directories

Table 3-126 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
SODIR	Changed	N/A	Supernode, BRISC	RES

Accessing directory:SODIR

To access

Type SERVORD.

To return to CI

Type QUIT.

Commands

COPYSET

Table of New/modified commands

Table 3-127 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
COPYSET	Changed		SODIR

Command name:COPYSET

Command type

NON-MENU

Command target

SUPERNODE, BRISC

Command availability

RES

Command description

New lines can be easily provisioned using the COPYSET Servord command. The command prompts for up to 100 individual DN and LEN pairs to be datafilled and a model name. The customer configuration along with the options that are associated with the model will be copied to the new DN and LEN pairs.

Warning

Not Applicable.

Command syntax

COPYSET {SONUMBER}{DN_LEN} {MODNAME}

Parameter definitions**Table 3-128 COPYSET Parameter Definitions**

PARAMETER	VALUE	DEFINITION
SONUMBER	NEW_SO_DUE	The unique number of the service order to be entered.
DN_LEN	SO_DN -TABLE OF 7 {N,1,2,3,4,5,6,7,8,9,0,B,C,D,E ,F}'S EXT_LEN	Directory Number LEN of the DN to be changed.
MODNAME	String of up to 32 characters	Name associated with model set.

Responses**Response 1**

Checking DN 6215000 / LEN HOST 00 0 00 06

Updating DN 6215000 / LEN HOST 00 0 00 06

Explanation:

The checking and updating messages are displayed for each DN/LEN pair. Additional messages may get displayed after each checking and/or updating message.

System action:

After the checking message is displayed, the system checks the DN/LEN pair. After the updating message is displayed, the system updates the DN/LEN pair.

User action:

None.

Response 2EXCEPTION REPORT:

All DN/LEN pairs have been datafilled.

Explanation:

The exception report is displayed at the conclusion of the COPYSET command. This particular exception report is displayed if all the DN/LEN pairs pass checking and updating.

System action:

None.

User action:

None.

Response 3EXCEPTION REPORT:

All the following DN/LEN pairs have been datafilled with the model's datafill except:

DN 6216001/ LEN HOST 00 0 00 22

Explanation:

The exception report is displayed at the conclusion of the COPYSET command. This particular exception report is displayed if at least one of the DN/LEN pairs fails checking and/or updating. The DN/LEN pairs which fail either the checking and/or updating are listed in the exception report.

System action:

None.

User action:

None.

Notes

None.

Examples

>COPYSET (CR)

SONUMBER: NOW 93 6 15 PM

DN_LEN:

> 6215000 0 0 0 6 (CR)

DN_LEN:

> 6215001 0 0 0 7 (CR)

DN_LEN:

> 6215002 0 0 0 8 (CR)

DN_LEN:

> \$

MODNAME:

> PPHNPSET (CR)

COMMAND AS ENTERED:

COPYSET NOW 93 6 15 PM 6215000 HOST 00 0 0 6 6215001 0 0 0 7 6215002 0 0 0 8 \$
PPHNPSET

ENTER Y TOCONFIRM, N TO REJECT OR E TO EDIT

> Y

The model set contains secondary DN(s). Any options specific to the DN(s) will
not be copied over.

GIC will not be copied to the new set(s).

Checking DN 6215000 / LEN HOST 00 0 00 06

Checking DN 6215001 / LEN HOST 00 0 00 07

Checking DN 6215002 / LEN HOST 00 0 00 08

Updating DN 6215000 / LEN HOST 00 0 00 06

Updating DN 6215001 / LEN HOST 00 0 00 07

Updating DN 6215002 / LEN HOST 00 0 00 08

EXCEPTION REPORT:

All DN/LEN pairs have been datafilled.

Alarms

Alarm name:

Not Applicable.

Conditions required to raise the alarm

Not Applicable.

Duration of the alarm

Not Applicable.

AN1430mm.aa06

MAP CI Interface

Directories

No directories are affected by this feature.

Commands

No commands are affected by this feature.

Alarms

No alarms are affected by this feature.

TAMI

The TAMI is not affected by this feature.

TOPS-MP

The TOPS-MP position's interface is not affected by this feature. A related TPC feature, however, does change the interface; please refer to the DDOC for AN1137.

TOPS-IV

This feature affects TOPS-IV positions as follows:

Display of international numbers

Expanded international numbers (i.e. those with more than 12 digits) are too long to fit in the present called number field. To circumvent this limitation, all international called numbers will be displayed on the line immediately following the regular called number position in the same column as before. Domestic called numbers are unaffected.

Since the number is appearing in a location extremely close to where it has always appeared, and is not displacing any other fields, little or no operator retraining will be necessary

Figure 3-32 Display of international numbers with more than 12 digits

0+	GNOM BMF		
		OVS	
CLD#	CCC-NNNNNNNNNNNNNN		
CHG XXX.XX	XXX:XX MIN	OC XX	

Entry of international numbers

TOPS-IV positions will now accept entry of international numbers up to 15 digits in length, as opposed to the previous limit of 12 digits. The keys for entering numbers remain unchanged.

Other changes

This feature makes no other changes to TOPS-IV functionality.

TOPS Devices

TOPS currently has a number of miscellaneous devices (e.g. AutoQuote TTYs), some of which input, print out, or display international numbers. These must be slightly modified to support expanded international numbers in cases where they don't already.

The devices whose output is modified are:

- VQ (international call reports)
- AQ (international call reports)
- DUAQ (international call reports)
- RECORD (international call reports, and any affected logs output on it)
- NOTIS (the SNAC logs that it outputs will be modified)

One device has both its input and its output modified:

- HADS (charge adjust messages: input and output)

For the HOBIC devices, supporting the expanded international numbers has increased the size of the charge, charge adjust, and credit/debit messages so that they will no longer fit on a single 80 character line. Therefore, each of these messages will now occupy two lines. The order of the fields within the messages has not been altered, although they may be displaced from their regular character position.

AN1457mm.aa04**TOPS operator training information**

The changes to operator behavior are discussed in the FN portion of this document. A summary of the operator behavior changes follows:

- When there is enough call data to initiate a rating query, the query will be launched. An example would be class charging a coin call as station paid. A second example would be selecting Toll and Assist (TA) service following a Directory Assistance (DA) listing announcement, thereby initiating DA call completion (DACC). The full list of operator actions resulting in query generation can be found in the FN portion of this document.
- When the query is outstanding, a waiting icon will be displayed, and the DMS will ignore most call related operator keystrokes (except Cancel Call and Request CAMA). Non-call keystrokes (such as headset unseat and Make Busy) are processed normally.
- When the waiting icon is erased, the query is completed. A coin call will display time and charge information at this time. A hotel call does not display time and charge information. If the query failure display does not appear, the rating succeeded and the operator should proceed as practice dictates.
- If the query failure indication appears, the rating query failed. On coin calls, invalid charges are displayed as well. When the query fails, the operator can attempt to send the query again. They can prompt for alternate billing. They can offer the service for free. Finally, they can cancel the call. The operating company will dictate which practice to employ.
- To offer an Message Telecommunication Service (MTS) call or DACC for free, the operator should release ("float") the call. Calls with invalid charges can be floated (as with internally rated calls).
- To offer DA service for free, the operator should release the call to announcement, or verbally quote it and key DA service.
- The operator cannot select alternate billing for a coin call overtime period on which the subsequent rating query failed. This is because the first portion of the call was already billed as sent-paid.

TOPS position display changes

Waiting icon

For calls at an operator when a rating query is sent, it is necessary to indicate to the operator that a rating query is in progress. This will require an existing display in a new location.

For Line Information Database (LIDB) collect and special number billing queries, the position displays a waiting icon when the LIDB query is in progress. The waiting icon appears in the called number area for collect queries, and the special number area for special number queries.

A similar waiting icon will be displayed while an external rating query is in progress. For TOPS-MP positions, refer to AN1137: "TPC04: Human-Machine Interface Changes" for a description of the icon and its location. For Open Position Protocol (OPP) positions which have a unified waiting icon location, the waiting icon will appear in the same location as for collect and special number queries. This is feasible because rating queries and LIDB queries are mutually exclusive.

As with LIDB queries, keystrokes except Cancel Call and Request CAMA are ignored by the TOPS switch during the query. Outstanding rating queries can be cancelled via the Cancel Call operator action.

Non-call keystrokes such as headset unseat and Make Busy are not ignored.

Query failure

When a rating query fails, a query failure display will appear on the screen. This display also appears for certain LIDB query failure scenarios. It can be reused because rating queries and LIDB queries are mutually exclusive.

The query failure display will appear when a rating query failure occurs while a call is at position. The display will also appear when a call arrives at an operator because rating failed during automated processing of the call. In the case of call arrival, the operator should check the billing information. If the call is sent-paid, a rating query failed. If the call is not sent-paid, a LIDB query failed. The position may have a more specific query failure indication to indicate the type of query failure.

Query success

When the query is successful, the waiting icon will be erased, and time and charge information will be displayed on a coin call. A hotel call does not receive time and charge displays. If the waiting icon is erased and the query failure display does not appear, the query succeeded.

Invalid charges

When a rating query failure occurs on a sent-paid coin call, and the call is at position or routed to position due to the failure, the invalid charges will be displayed. The invalid charges may be indicated as “\$999.99”, or in other manners (i.e. alert colors).

TOPS-BP screen displays

The TOPS-BP (Basic Purpose)¹ position can handle sent-paid DA traffic. It does not have any coin displays so datafill should not route coin traffic to TOPS-BP positions. Hotel calls can be handled by TOPS-BP positions, but the room number cannot be entered. Therefore the parameter DA_BP_HOTEL_ROOM_REQUIRED in Table VROPT must be set to N.

The TOPS-BP position has a limited screen size and cannot display the previously described indications. The following displays will be used on the TOPS-BP position:

- Waiting icon: The TOPS-BP position will display an “R” on row 0, column 1.
- Query failure: The TOPS-BP position will flash the “R”.
- Query success: The “R” will be erased.
- Invalid charges: No charges are displayed on the TOPS-BP position. Charges are only displayed on coin calls.

TOPS-BP example: external rating in progress

In the following diagram, the caller dialled 555-1212 from phone number 919-991-7000. When the call is presented to the DA operator, rating is in progress. The “R” on the top row indicates this.

¹Also known as TOPS Multi-Purpose Extended (MPX) Release 1, or TOPS-MPX Auxiliary Operator Services System (AOSS)

Table 3-129 Example TOPS-BP screen, rating in progress

	R														
C	L	G	#	9	1	9	-	9	9	1	-	7	0	0	0
X	3												5	5	5

TOPS-BP example: external rating failure

In the following diagram, the caller dialled 555-1212 from phone number 919-991-7000. When the call was presented to the DA operator, rating was in progress. The query failed, and the flashing “R” on the top row indicates this.

Table 3-130 Example TOPS-BP screen, rating query failure

	<R>														
C	L	G	#	9	1	9	-	9	9	1	-	7	0	0	0
X	3												5	5	5

TOPS-BP example: external rating successful

In the following diagram, the caller dialled 555-1212 from phone number 919-991-7000. When the call was presented to the DA operator, rating was in progress. The query succeeded, and the “R” in the top row is erased.

Table 3-131 Example TOPS-BP screen, rating query successful

C	L	G	#	9	1	9	-	9	9	1	-	7	0	0	0
X	3												5	5	5

TOPS-IV screen displays

TOPS-IV positions, which handle only TA traffic, are manufacture discontinued (MD), and will not have any new or changed screen displays. Therefore these positions will not display when a rating query is in progress, or when a rating query fails. On an externally rated call, the operator may experience a short time period when the rating query is outstanding and their keystrokes are ignored. The TOPS-IV operator will receive invalid charges when rating fails on a coin call.

There will not be a situation where a rating query fails and the TOPS-IV operator does not receive some indication via existing displays, because coin calls will display invalid charges, and hotel TA calls are not rated while at an operator position. DA and DACC services are not handled by TOPS-IV operators. If an ACTS rating query fails, and the call is routed to the operator, the invalid charges will be displayed on call presentation.

TOPS-MP screen displays

See DDOC AN1137: "TPC04: Human-Machine Interface Changes" for a description of the TOPS-MP changes associated with external rating.

OPP compliant positions

See the Open Position Protocol (NIS: Q214-1) for a description of the OPP changes associated with external rating.

TOPS device changes

There are no changes to the format of the records output on TOPS devices such as voice quote, autoquote, etc. In the event of rating failure, the charge field on the output record will display the nil charge ("99999", meaning \$999.99). This is the same display which appears if internal rating fails. An example output on a voice quote (VQ) device follows:

Valid charges (\$0.30):

2153	619-322-1234	<HOS0	201-221-1234	01261310	2	030	000	345	695

Invalid charges (\$999.99):

2153	619-322-1234	<HOS0	201-221-1234	01261310	2	99999	000	345	695

The only record on which the rate step appears is the record generated on a hotel billing device following a charge adjust by the operator. On externally rated calls, there is no rate step, so the hotel billing record will contain the nil rate step ("999"). An example output on a VQ device follows:

Internally rated, charge adjusted call, rate step = 7:

```
2153 619-322-1234 CAOS0 201-221-1234 1115 0M25 7 345 695
```

Externally rated, charge adjusted call, rate step = nil (999):

```
2153 619-322-1234 CAOS0 201-221-1234 1115 0M25 999 345 695
```

Directories

No directories are affected by this feature. This section is not applicable.

Accessing directory:

N/A

To access

N/A

To return to CI

N/A

Commands

No commands are affected by this feature. This section is not applicable.

Table of New/modified commands

Table 3-132 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

None.

Command name:

N/A

Command type

N/A

Command target

N/A

Command availability

N/A

Command description

N/A

Warning

N/A

Command syntax

N/A

Parameter definitions**Table 3-133 Parameter Definitions**

PARAMETER	VALUE	DEFINITION

Responses

N/A

Response

N/A

Explanation:

N/A

System action:

N/A

User action:

N/A

Notes

N/A

Examples

N/A

Alarms

No alarms are affected by this feature. This section is not applicable.

Alarm name:

N/A

Conditions required to raise the alarm

N/A

Duration of the alarm

N/A

AN1506mm.aa03**Directories****Table of new/modified directories****Table 3-185**New/modified directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
XRATE	NEW		ALL	BOTH

Accessing directory: XRATE**To access**

CI:
>XRATE

To return to CI

XRATE :
>QUIT

Commands
Table of New/modified commands**Table 3-186 New/modified commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
BILLOPT	NEW		XRATE
BILLPTY	NEW		XRATE
CALCCHG	NEW		XRATE
CARRID	NEW		XRATE
CLDNO	NEW		XRATE
CLDNAT	NEW		XRATE
CLGNO	NEW		XRATE
CLGNAT	NEW		XRATE
CMPNY	NEW		XRATE
EQUIP	NEW		XRATE
FGDSTAT	NEW		XRATE
HANDLING	NEW		XRATE
INTERVAL	NEW		XRATE
OPRHAND	NEW		XRATE
PREFIX	NEW		XRATE
QACG	NEW		XRATE
QUIT	NEW		XRATE
SELQUERY	NEW		XRATE
SHOW	NEW		XRATE
SRVDESC	NEW		XRATE
SRVMOD	NEW		XRATE
TIME	NEW		XRATE
TIMEDESC	NEW		XRATE
TIMEOUT	NEW		XRATE
TRACE	NEW		XRATE

Command name: BILLOPT**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select a method of payment for an XRATE query.

Warning

Not Applicable

Command syntax

BILLOPT <billopt>

Parameter definitions**Responses****Table 3-187 Billmode Parameters**

PARAMETER	VALUES	DEFINITION
billopt	{CASH, LINE, CLG_CARD, *DEBIT_CARD, *CASH_CARD, CREDIT_CARD}	The method of payment for a call segment. Values designated with * are not supported.

Response 1: Success

BILLOPT = <billopt>

Explanation:

The BILLOPT XRATE query parameter now has the value of <billopt>.

Note: This command is always successful under all conditions as long as one of the values listed above is used as the required parameter.

System action:

The BILLOPT XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>BILLOPT LINE  
BILLOPT = LINE
```

Response 2: Unsupported Value

<billopt> IS NOT CURRENTLY SUPPORTED

Explanation:

The value entered is not currently supported by XRATE.

System action:

None.

User action:

None.

Example:

```
XRATE:  
>BILLOPT CASH_CARD  
CASH_CARD IS NOT CURRENTLY SUPPORTED.
```

Command name: BILLPTY**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to select the party being billed.

Warning

Not Applicable.

Command syntax

BILLPTY <billed party>

Parameter definitions

Table 3-188 Billparty Parameters

PARAMETER	VALUES	DEFINITION
billed party	{ORIG, TERM, 3RD_NUM_ORIG, 3RD_NUM_TERM}	The party being billed for a call segment.

Responses**Response:**

BILLPTY = <billed party>

Explanation:

The BILLPTY XRATE parameter now has the value of <billed party>.

System action:

The BILLPTY XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>BILLPTY ORIG  
BILLPTY = ORIG
```

Command name: CALCCHG**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command sends an RTRS query and then interprets whatever response that comes from the RTRS. If the query is unsuccessful, this command gives the reason why.

Warning

An RTRS system must be connected to the switch via appropriate CCS7 translations for this command to successfully send a query.

Command syntax

CALCCHG

Parameter definitions

This command has no parameters.

Responses

Response 1: Query Success

SENDING CHARGE QUERY...
CHARGE = X.XX
TIME INTERVAL = X:XX.XX
DURATION = XX SECS GAP = X.XX SECS
ELAPSED QUERY TIME = X.X SECS

Explanation:

A successful query response returned a charge of \$X.XX. It also returned time interval and ACG data. The time interval returned and the ACG data returned are optional. They are not necessarily returned on successful RTRS queries.

System action:

None.

User action:

None.

Example:

```
XRATE:
>CALCCHG
SENDING CHARGE QUERY...
CHARGE = 2.10
ELAPSED QUERY TIME = 0.6 SECS
```

Response 2: RTRS Detects Error

```
SENDING CHARGE QUERY...
QUERY FAILURE - ERROR IN XRATE QUERY
DURATION = XXX SECS GAP = X.XX SECS
ELAPSED QUERY TIME = X.X SECS
```

Explanation:

The RTRS detected an error in the query message sent to it. It noted the error in the response message and also sent ACG data. The ACG data is optional. It is not necessarily returned when the RTRS detects an error.

System action:

None.

User action:

Check if RTRS has the necessary data for calculating charges for the given query.

Example:

```
XRATE:
>CALCCHG
SENDING CHARGE QUERY...
QUERY FAILURE - ERROR IN XRATE QUERY
ELAPSED QUERY TIME = 2.0 SECS
```

Response 3: Error in RTRS Response

```
SENDING CHARGE QUERY...
QUERY FAILURE - ERROR IN RTRS RESPONSE
ELAPSED QUERY TIME = X.X SECS
```

Explanation:

TOPS detected an error in the RTRS query response. All rating data and ACG data is ignored.

System action:

A severe error will generate a TCAP log.

User action:

Check for software or hardware problems on the RTRS.

Example:

```
XRATE:
>CALCCHG
SENDING CHARGE QUERY...
QUERY FAILURE - ERROR IN RTRS RESPONSE
ELAPSED QUERY TIME = 0.7 SECS
```

Response 4: Timeout Waiting for Query Response

```
SENDING CHARGE QUERY...
QUERY FAILURE - RTRS RESPONSE TIME OUT
ELAPSED TIME = X.X SECS
```

Explanation:

The XRATE tool timed-out waiting for a response to a rating query. The XRATE tool time-out period is set via the TIMEOUT command.

System action:

None.

User action:

Check for problems on the RTRS.

Example:

```
XRATE:
>CALCCHG
SENDING CHARGE QUERY...
QUERY FAILURE - RTRS RESPONSE TIME OUT
ELAPSED TIME = 30.0 SECS
```

Response 5: Query Returned

SENDING CHARGE QUERY...
QUERY FAILURE - RETURNED TO SENDER
ELAPSED TIME = X.X SECS

Explanation:

The rating query was returned before it ever reached the RTRS. This is usually caused by some type of network routing failure.

System action:

None.

User action:

Check CCS7 network datafill and connections.

Example:

XRATE:
>CALCCHG
QUERY FAILURE - RETURNED TO SENDER
ELAPSED TIME = 0.4 SECS

Response 6: Query Blocked by ACG

QUERY FAILURE - QUERY BLOCKED BY ACG CONTROLS
DURATION = XXX SECS GAP = X.X SECS

Explanation:

ACG controls are active and the gap period specified by the controls has not elapsed since the last rating query was sent to the RTRS. Therefore the query was never sent from the DMS.

System action:

None.

User action:

Wait until the ACG gap period has expired before making a query **or** wait until ACG duration has expired.

Example:

```
XRATE:  
>CALCCHG  
QUERY FAILURE - QUERY BLOCKED BY ACG CONTROLS  
DURATION = 512 SECS GAP = 10.00 SECS
```

Response 7: Query Blocked by TOPS

```
QUERY FAILURE - QUERY BLOCKED BY TOPS ERROR CHECKS  
<ERROR MESSAGE>
```

Explanation:

TOPS did not send the query because it detected an error or inconsistency in the query data. Therefore the query was never sent from the DMS.

System action:

None.

User action:

Check and revise XRATE parameters.

Example:

```
XRATE:  
>CALCCHG  
QUERY FAILURE - QUERY BLOCKED BY TOPS ERROR CHECKS  
NO TRANSACTION IDS ARE AVAILABLE
```

Command name: CARRID**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select the carrier type and identifier for an XRATE query.

Warning

Not Applicable

Command syntax

CARRID <lata type> <4 digits>

Parameter definitions

Table 3-189 CARRID Parameters

PARAMETER	VALUES	DEFINITION
lata type	{*INTRA, INTER, NONE}	Intra or Inter-LATA carrier or no carrier. Values designated with * are not supported.
4 digits	Up to 4 decimal digits	The carrier identifier

Responses**Response:**

CARRID = <lata type> XXXX

Explanation:

The CARRID XRATE parameter now has lata type <lata type> and carrier identifier digits XXXX.

System action:

The CARRID XRATE parameter is updated with the lata type and carrier identifier digits specified by the command parameters.

User action:

None.

Notes:

None.

Example:

```
XRATE:  
>CARRID INTER 9999  
CARRID = INTER 9999
```

Command name: CLDNO**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select the digits of the called party or the service access code (e.g. 411).

Warning

Not Applicable.

Command syntax

CLDNO <15 digits>

Parameter definitions

Table 3-190 CLDNO Parameters

PARAMETER	VALUES	DEFINITION
10 digits	Up to 15 decimal digits, enclosed by quotation marks.	The digits of the called party or service access code.

Responses**Response**

CLDNO = <15 digits>

Explanation:

The CLDNO XRATE parameter now has the value of <15 digits>.

System action:

The CLDNO XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>CLDNO '0123456789'  
CLDNO = 0123456789
```

Command name: CLDNAT**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select the nature of the called number.

Warning

None.

Command syntax

CLDNAT <cldnat>

Parameter definitions

Table 3-191 CLDNAT Parameters

PARAMETER	VALUES	DEFINITION
cldnat	{NAT, INTERNAT}	National or International

Responses

Response

CLDNAT = <cldnat>

Explanation:

The CLDNAT XRATE parameter now has a value of <cldnat>.

System action:

The CLDNAT XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>CLDNAT NAT  
CLDNAT = NAT
```

Command name: CLGNO

Command type

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select the digits of the calling party.

Warning

Not Applicable.

Command syntax

CLGNO <10 digits>

Parameter definitions

Table 3-192 CLGNO Parameters

PARAMETER	VALUE	DEFINITION
10 digits	10 decimal digits	The digits of the calling party

Responses

CLGNO = <10 digits>

Explanation:

The CLGNO XRATE parameter now has the value of <10 digits>.

System action:

The CLGNO XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:
>CLGNO 0123456789
CLGNO = 0123456789
```

Command name: CLGNAT**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the users to select the nature of the calling number.

Warning

Not Applicable.

Command syntax

CLGNAT <clgnat>

Parameter definitions

Table 3-193 CLGNAT Parameters

PARAMETER	VALUES	DEFINITION
clgnat	{RESTR, UNRESTR}	Presentation Restriction or No Presentation Restriction

Responses

CLGNAT = <clgnat>

Explanation:

The CLGNAT XRATE query parameter now has the value <clgnat>.

System action:

The CLGNAT XRATE query parameter is updated with the value specified by the command parameter.

Example:

```
XRATE:  
>CLGNAT UNRESTR  
CLGNAT = UNRESTR
```

Command name: CMPNY**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select a company code for an XRATE query.

Warning

Not Applicable

Command syntax

CMPNY <6 digits>

Parameter definitions**Table 3-194 CMPNY Parameters**

PARAMETER	VALUE	DEFINITION
6 digits	Up to 6 decimal digits, enclosed by quotation marks.	The digits of the company code

Responses

CMPNY = <6 digits>

Explanation:

The CMPNY XRATE parameter now has a value of <6 digits>.

System action:

The CMPNY XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>CMPNY '012345'  
CMPNY = 012345
```

Command name: EQUIP**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to select the type of equipment being used by the originating station.

Warning

None

Command syntax

EQUIP <equipment>

Parameter definitions

Please note that all values designated with * are unsupported.

Table 3-195 EQUIP Parameter Values Definitions

<equipment> PARAMETER VALUES	DEFINITIONS
POTS	Plain Old Telephone Service (POTS) Line - Business/Residential
LEC_POSTPAY	LEC Public - Standard Interface - Postpay Overtime
*POTS_RES_MSG1	POTS Line - Residential - Message Rate 1
*POTS_RES_MSG2	POTS Line - Residential - Message Rate 2
*LEC_SEMI	LEC Semi-Public
*POTS_BIZ_FLAT	POTS Line - Business - Flat Rate
*POTS_BIZ_MSG1	POTS Line - Business - Message Rate 1
*NOCOIN	Coinless (non Intelligent Payphone Provider (IPP))
*NOCOIN_IPP	Coinless IPP
*LEC_CARD	LEC Prepaid Telecommunications Card Station
*POTS_BIZ_MSG2	POTS Line - Business - Message Rate 2
LEC_PREPAY	LEC Public - Standard Interface - Prepay Interface
*LEC_ALT	LEC - Alternate Interface
*IC_STAND	IC Public - Standard Interface
*IC_ALT	IC Public - Alternate Interface
*POTS_RES_FLAT	POTS Line - Residential - Flat Rate
*VQ_NOTAX	Voice Quote - without tax
VQ_TAX	Voice Quote - with tax
*IPP_STAND	IPP Standard Interface
*IPP_ALT	IPP Alternate Interface
*HOSP	Hospital
*PRIS_NOIPP	Prison (non-IPP)
*AQ_NOTAX	Auto Quote - without tax
AQ_TAX	Auto Quote - with tax
*DORM	Dormitory Line
*CENTREX	Centrex Line

Table 3-195 EQUIP Parameter Values Definitions

<equipment> PARAMETER VALUES	DEFINITIONS
*PBX	Private Branch Exchange (PBX) Line
*PRIS_IPP	Prison (IPP)
*WATS	Wide Area Telecommunication Service (WATS) Line
*MOBILE	Cellular/Mobile
*PAGER	Pager
*PCS	Personal Communication Service

Responses

Response 1: Success

EQUIP = <equipment>

Explanation:

The EQUIP XRATE query parameter now has the value of <equipment>.

System action:

The EQUIP XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>EQUIP POTS  
EQUIP = POTS
```

Response 2: Unsupported Value

<equip> IS NOT CURRENTLY SUPPORTED.

Explanation:

The value entered is not currently supported by XRATE.

System action:

None.

User action:

None.

Example:

```
XRATE:  
>EQUIP LEC_CARD  
LEC_CARD IS NOT CURRENTLY SUPPORTED
```

Command name: FGDSTAT**Command type**

NON-MENU

Command target

All processors

Command availability

RES

Command description

This command allows the user to specify a call that uses the Feature Group D signalling method.

Warning

Not Applicable.

Command syntax

FGDSTAT <YES/NO>

Parameter definitions

Table 3-196 FGDSTAT Parameter Definitions

PARAMETER	VALUES	DEFINITION
YES/NO	YES or NO	Indicates if the call segment uses Feature Group D.

Responses

Response

FGDSTAT = <YES/NO>

Explanation:

The FGDSTAT XRATE query parameter now has the value of <YES/NO>.

System action:

The FGDSTAT XRATE parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>FGDSTAT YES  
FGDSTAT = YES
```

Command name: HANDLING

Command type

NON-MENU

Command availability

RES

Command description

This command allows the user to select the handling of a call.

Warning

Not Applicable.

Command syntax

HANDLING <handling>

Parameter definitions

Table 3-197 Handling Parameters

PARAMETER	VALUES	DEFINITION
handling	{STATION, PERSON, NOT_APPL}	If the call is station-to-station or person-to-person or if handling is not applicable to the current service.

Responses**Response**

HANDLING = <handling>

Explanation:

The HANDLING XRATE query parameter now has the value <handling>.

System action:

The HANDLING XRATE parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>HANDLING STATION  
HANDLING = STATION
```

Command name: INTERVAL**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to select time interval used for an XRATE query. The INTERVAL parameter is only used for queries that require a time period in order to calculate the charge, e.g. certain services, such as Directory Assistance calculate their charges irrespective of the time period.

Warning

Not Applicable.

Command syntax

INTERVAL <minutes> <seconds> <hundredths of seconds>

Parameter definitions**Table 3-198 Interval Parameters**

PARAMETER	VALUES	DEFINITIONS
minutes	0 to 9999	The number of minutes in the time interval
seconds	0 to 59	The number of seconds in the time interval
hundredths of seconds	0 to 99	The number of hundredths of seconds in the time interval.

Responses**Response**

INTERVAL = <minutes> <seconds> <hundredths of seconds>

Explanation

The INTERVAL XRATE query parameter now has the value of <minutes>:<seconds>.<hundredths of seconds>.

System action:

The INTERVAL XRATE parameter is updated with the value of <minutes>:<seconds>.<hundredths of seconds>.

User action:

None.

Example:

```
XRATE:
>INTERVAL 3 15 00
INTERVAL = 3:15.00
```

Command name: OPRHAND**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to select the type of operator intervention for an XRATE query.

Warning

Not Applicable.

Command syntax

OPRHAND <oprhand>

Parameter definitions

Table 3-199 Oprhand Parameters

PARAMBER	VALUES	DEFINITIONS
oprhand	{OPR_HAND, OPR_ASSIST, AUTO_OPR, NO_OPR}	The type of operator intervention.

Responses

Response

OPRHAND = <oprhand>

Explanation:

The OPRHAND XRATE parameter now has the value of <oprhand>.

System response:

The OPRHAND XRATE query parameter is updated with the value specified by the command parameter.

User Response:

None.

Example:

```
XRATE:  
>OPRHAND NO_OPR  
OPRHAND = NO_OPR
```

Command name: PREFIX

Command type

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to select the dialed prefix digits for an XRATE query.

Warning

Not Applicable.

Command syntax

PREFIX <prefix>

Parameter definitions

Table 3-200 Prefix Parameters

PARAMETER	VALUES	DEFINITIONS
prefix	{1_PLUS, 0_PLUS, 0_MINUS, 01_PLUS, 011_PLUS, 00_MINUS, NO_PFX}	The dialed prefix digits of a call.

Responses

Response

PREFIX = <prefix>

Explanation:

The PREFIX XRATE query parameter now has the value of <prefix>.

System action:

The PREFIX XRATE query parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>PREFIX 1_PLUS  
PREFIX = 1_PLUS
```

Command name: QACG**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command queries the Automatic Code Gapping (ACG) status.

Warning

Not Applicable.

Command syntax

QACG

Parameter definitions

This command has no parameters.

Responses

Response 1

AUTOMATIC CODE GAPPING IS ACTIVE
ACG DURATION = XX SECS ACG GAP = X.XX SECS
ACG CONTROLS EXPIRES IN XX SECONDS

Explanation:

Returns ACG controls for RTRS queries. XRATE also returns the duration that the controls are in effect and the gap between queries that is necessary while the controls are in effect.

System action:

None.

User action:

None.

Example:

XRATE:
>QACG
AUTOMATIC CODE GAPPING IS ACTIVE
ACG DURATION = 128 SECS ACG GAP = 2.00 SECS
ACG CONTROLS EXPIRES IN 12 SECONDS

Response 2

AUTOMATIC CODE GAPPING IS NOT ACTIVE

Explanation:

ACG controls are not in effect.

System action:

None.

User action:

None.

Example:

```
XRATE:  
>QACG  
AUTOMATIC CODE GAPPING IS NOT ACTIVE
```

Command name: QUIT**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

The command allows the user to quit the XRATE CI increment.

Warning

Not Applicable.

Command syntax

QUIT

Parameter definitions

This command has no parameters.

Responses**Response**

QUITTING XRATE

Explanation:

The XRATE increment is exited.

System action:

Exit the XRATE increment.

User action:

None.

Command name: SELQUERY

Command type

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to select or display pre-programmed XRATE query parameter values.

Warning

Not Applicable.

Command syntax

SELQUERY <option> <query number>

Parameter definitions

Table 3-201 SELQUERY Parameter Definitions

PARAMETER	VALUES	DEFINITIONS
option	{SELECT, DISPLAY, DISPALL}	Choose to select predefined parameter values, to display the values for a particular query type or display the values for every predefined query type.
query number (not available with DISPALL option).	0 - 4	The number associated with a pre-programmed query type.

Responses

Response 1: SELECT Option

<query description>
PLEASE CHECK THE VALUES FOR THE FOLLOWING
PARAMETERS
<parameter list>

Explanation:

XRATE returns a brief description of the query type selected. It also returns a list of the query parameters that the user must initialize.

System action:

The query parameters are updated with values necessary for making a query of the given type.

Example:

```
XRATE:
>SELQUERY SELECT 0
COIN CALL QUERY
PLEASE CHECK THE VALUES FOR THE FOLLOWING
PARAMETERS
CLGNO
CLDNO
CMPNY
```

Response 2: DISPLAY Option

<query description>
<list of query parameter values>

Explanation:

XRATE returns a brief description of the query type selected and a list of the default parameter values that SELQUERY uses for the query type.

System action:

None.

User action:

None.

Example:

```
XRATE:
>SELQUERY DISPLAY 1
HOTEL CALL QUERY
BILLMODE = LINE
BILLPTY = ORIG
EQUIP = POTS
FGDSTAT = NO
HANDLING = STATION
INTERVAL = 5:00.00
PREFIX = 1_PLUS
SRVDESC = STANDARD
SRVIND = MTS
SRVMOD = RATING
```

Response 3: DISPALL Option

```
0 = COIN CALL QUERY
1 = HOTEL CALL QUERY
2 = DIRECTORY ASSISTANCE CALL QUERY
3 = TIME AND CHARGES CALL QUERY
4 = DIRECTORY ASSISTANCE CALL COMPLETION
```

Explanation:

XRATE prints out a short description of the pre-defined query types.

System action:

None.

User action:

None.

Command name: SHOW**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to display the value of every XRATE parameter.

Warning

Not Applicable.

Command syntax

SHOW

Parameter definitions

This command has no parameters.

Responses**Response**

BILLOPT = <billopt>
BILLPTY = <billed party>
CARRID = <lata type> <6 digits>
CLDNO = <10 digits>
CLDNAT = <cldnat>
CLGNO = <10 digits>
CLGNAT = <clgnat>
CMPNY = <6 digits>
EQUIP = <equipment>
FGDSTAT = <YES/NO>

HANDLING = <handling>
INTERVAL = <minutes>:<seconds>.<hundredths of seconds>
OPRHAND = <oprhand>
PREFIX = <prefix>
SRVDESC = <service description> <service indicator>
SRVMOD = <query reason>
TIME = <day of week> <year> <month> <day of month>
<hour>:<minute>:<second>
TIMEDESC = <timedesc>
TIMEOUT = <seconds>

Explanation:

The SHOW command has listed the current values of all of the XRATE parameters.

System action:

None.

User action:

None.

Example:

```
XRATE:
>SHOW
BILLOPT = LINE
BILLPTY = ORIG
CARRID = NONE 000000
CLDNO = 0123456789
CLDNAT = NAT
CLGNO = 9876543210
CLGNAT = UNRESTR
CMPNY = 000000
EQUIP = POTS
FGDSTAT = N
HANDLING = STATION
INTERVAL = 1:00:00
OPRHAND = NO_OPR
PREFIX = 1_PLUS
SRVDESC = STANDARD MTS
SRVMOD = T_AND_C
TIME = WED 1995 MAR 22 14:36:29
TIMEDESC = CURR
TIMEOUT = 60
```

Command name: SRVDESC**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to choose the service for a call segment.

Warning

Not Applicable.

Command syntax

SRVDESC <service description> <standard service type> or <enhanced service number>

Parameter definitions**Table 3-202 Srvdesc Parameters**

PARAMETER	VALUES	DEFINITION
service description	{STANDARD, ENHANCED, *AIN}	The category of service for a call segment. Values designated with * are not supported.
standard service types	{MTS, *BLV, DA, DACC, OHDACC_MTS, ADACC_MTA}	Message Telecommunications Service, Busy Line Verification, Directory Assistance, Directory Assistance Call Completion, Operator Handled DA Call Completion with Message Telecommunications Service, Automated DA Call Completion with Message Telecommunications Service. This argument is valid only when the user chooses a service description of STANDARD. Values designated with * are not supported.
enhanced service number	0 - 62	The number of the ENHANCED service. This argument is valid only when the user chooses a service descriptor of ENHANCED.

Responses

Response 1: Success

SRVDESC = <service description> <standard service type> or <enhanced service number>

Explanation:

The value of the SRVDESC parameter is now <service description> and <standard service type> or <enhanced service number>, depending on if the <service description> is STANDARD or ENHANCED.

System action:

The SRVDESC XRATE query parameter is updated with the values specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>SRVDESC STANDARD MTS  
SRVDESC = STANDARD MTS
```

Response 2: Unsupported Value

<parameter> IS NOT CURRENTLY SUPPORTED

Explanation:

The user attempted to enter a parameter that is not supported, e.g. a parameter denoted with a * in the parameter definitions.

System action:

None.

User action:

None.

Example:

```
XRATE:
>SRVDESC STANDARD BLV
BLV IS NOT SUPPORTED
```

Command name: SRVMOD**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to choose why a rating query is needed.

Warning

Not Applicable.

Command syntax

SRVMOD <query reason>

Parameter definitions

Table 3-203 Srvmod Parameters

PARAMETER	VALUES	DEFINITIONS
query reason	{SERVICE, *QUOTE, T_AND_C, *NOTIFY}	Rating for a Service, Rate Quotation, Time & Charges, Charge Notification.

Responses**Response 1: Success**

SRVMOD = <query reason>

Explanation:

The SRVMOD XRATE query parameter now has the value of <query reason>.

System action:

The SRVMOD XRATE parameter is updated with the value specified by the command parameter.

User action:

None.

Example:

```
XRATE:  
>SRVMOD T_AND_C  
SRVMOD = T_AND_C
```

Response 2: Unsupported Value

<query reason> IS NOT CURRENTLY SUPPORTED

Explanation:

The user attempted to enter a <query reason> that is not supported, e.g. a <query reason> denoted with q * in the parameter definitions.

System action:

None.

User action:

None.

Example

```
XRATE:  
>SRVMOD QUOTE  
QUOTE IS NOT CURRENTLY SUPPORTED.
```

Command name: TIME**Command type**

NON-MENU

Command availability

RES

Command description

This command allows the users to select the date and the time of a queried call segment.

Warning

Not Applicable.

Command syntax

TIME <month> <day> <hour> <minute> <second>

Parameter definitions**Table 3-204 Time Parameters**

PARAMETER	VALUES	DEFINITION
month	{JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC}	The month
day	1-31	The day of the month
hour	0-23	The hour of the day
minute	0-59	The minute
second	0-59	The second

Responses**Response 1: Success**

TIME = <day of week> <year> <month> <day of month>
<hour>:<minute>:<second>

Explanation:

The TIME XRATE query parameter now has the value of the specified time and date. The <year> returned is the current year and the <day of week> is day of the week of the date in the current year.

System action:

The TIME XRATE query parameter is updated with the values specified by the command parameters.

User action:

None.

Example:

```
XRATE:  
>TIME MAR 8 11 21 18  
TIME = WED 1995 MAR 8 11:21:18
```

Response 2: Impossible Date

<month> HAS ONLY <integer> DAYS

Explanation:

The user entered a day of the month which is greater than the total number of days in the given month.

System action:

None; the TIME XRATE query parameter is not updated.

User action:

Check the date and re-enter one that is consistent.

Note:

This command supports leap years. Therefore, the maximum day of the month for February during a leap year is 29 while it is 28 for other years.

Example:

XRATE:
>TIME APR 31 20 04 10
APR HAS ONLY 30 DAYS

Command name: TIMEDESC**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to choose the meaning of the time interval given in the INTERVAL parameter.

Warning

None.

Command syntax

TIMEDESC <timedesc>

Parameter definitions

Table 3-205 Timedesc parameters

PARAMETER	VALUES	DEFINITION
timedesc	{CURR, CONCL}	The duration of time of a current call OR the length of time of a concluded call.

Responses**Response**

TIMEDESC = <timedesc>

Explanation:

The TIMEDESC parameter now has the value of <timedesc>.

System action:

The TIMEDESC XRATE parameter is updated with the value specified in the command parameter.

User action:

None.

Example:

```
XRATE:
>TIMEDESC CONCL
TIMEDESC = CONCL
```

Command name: TIMEOUT

Command type

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to select a maximum waiting period for receiving a reply for a RTRS query in seconds.

Warning

None.

Command syntax

TIMEOUT <seconds>

Parameter definitions**Table 3-206 Timeout Parameters**

PARAMETER	VALUES	DEFINITION
seconds	1 - 60	The number of seconds in the maximum wait period.

Responses

TIMEOUT = <seconds>

Explanation:

The TIMEOUT XRATE query parameter now has a value of <seconds> .

System action:

The TIMEOUT XRATE parameter is updated with the values specified in the command parameters.

Example:

```
XRATE:  
>TIMEOUT 3  
TIMEOUT = 3
```

Command name: TRACE**Command type**

NON-MENU

Command target

All processors.

Command availability

RES

Command description

This command allows the user to dump a captured copy of the last TCAP message sent by the RTRS as a query response. Please see the RTRS protocol document for a full description of the TCAP messages returned from an RTRS as responses to rating queries.

Warning

Not Applicable.

Command syntax

TRACE <format>

Parameter definitions

Table 3-207 Trace Parameters

PARAMETER	VALUES	DEFINITION
format	{RAW, FORMAT}	A raw or formatted message display

Responses

Response 1: Success

RESPONSE MSG = <hexadecimal stream>

PKG TYPE ID = <pkg type id> TRANS ID = <hex>

COMP TYPE ID = <comp type id> CORR ID = <hex> CHG AMT ID = <hex>

CHG DESC = <charge reason> CHG UNITS = <monetary unit>

CHARGE = <integer>

TIME INTERVAL ID = <hex> TIME DESC = <time description>

TIME INTERVAL = <integer>:<integer>.<integer> COMP TYPE ID = <hex>

OPER FMLY NAME = <oper fmly name> OPER SPEC = <oper spec>

ACG ID = <hex> CONTROL CAUSE = <cause reason> ACG DUR = <acg duration> ACG GAP = <acg gap>

Explanation:

A raw hexadecimal dump of a successful query response received from the RTRS with the same message in a formatted form. This response also contains the optional ACG component.

System action:

None.

User action:

None.

Example:

XRATE:
>TRACE FORMAT
RESPONSE MSG =
E818EA16CF0183F211DF45060A03000000E3DF4A050200200000E90
DCF00D0020701F205810303

PKG TYPE ID = RESPONSE TRANS ID = 9182F9D0

COMP TYPE ID = EA CORR ID = 0 CHG AMT ID = 45

CHG DESC = TIME & CHARGES CHG UNITS = DEFAULT CHARGE
= 227

TIME INTERVAL ID = 4A TIME DESC = DURATION OF CALL
SEGMENT

TIME INTERVAL = 2:00.00 COMP TYPE ID = E1

OPER FMLY NAME = 07 OPER SPEC = AUTOMATIC CODE GAP

ACG ID = 03 CONTROL CAUSE = DATABASE OVERLOAD ACG

DUR = 128 SEC

ACG GAP = 2.00 SEC

Response 2: Error Code Response

RESPONSE MSG = <hexadecimal stream>

PKG TYPE ID = <pkg type id> TRANS ID = <hex>

COMP TYPE ID = <hex> CORR ID = <hex> ERROR CODE ID = <hex>

ERROR CODE = <error code>

Explanation:

The RTRS query was not successful. The RTRS returned an error response. This type of message may also contain an optional problem data component.

System action:

None.

User action:

Check the given error code for clues on the precise nature of the error condition.

Example:

```
XRATE:  
>TRACE FORMAT  
RESPONSE MSG = E80AEB08CF01D8D30108F200  
  
PKG TYPE ID = RESPONSE  TRANS ID = 4D90DF41  
COMP TYPE ID = EB  CORR ID = 0  ERROR CODE ID = 06  
ERROR CODE = DATA UNAVAILABLE
```

Response 3: Problem Code Response

RESPONSE MSG = <hexadecimal stream>

```
PKG TYPE ID = <pkg type id>  TRANS ID = <hex>  
COMP TYPE ID = <hex>  CORR ID = <hex>  PROB CODE ID = <hex>  
PROB TYPE = <problem type>  
PROB SPEC = <problem spec>
```

Explanation

The RTRS sent a reject component in its response to indicate some type of protocol or application error caused by a TCAP message with incorrect Component sections.

System response:

None.

User response:

Check the problem type field.

Example:

```
XRATE:  
>TRACE FORMAT  
MSG RESPONSE = E80BEC09CF0187D5020202F200
```

PKG TYPE ID = RESPONSE TRANS ID = F90D7810
COMP TYPE ID = EC CORR ID = 0 PROB CODE ID = D5
PROB CODE LENGTH = 02 PROB TYPE = INVOKE
PROB SPEC = UNRECOGNIZED COMPONENT TYPE

Response 4: Abort Response

RESPONSE MSG = <hexadecimal stream>

PKG TYPE ID = <pkg type id> TRANS ID = <hex>
PABORT CAUSE ID = <hex> PABORT CAUSE = <pabort cause>

Explanation:

An abort message was returned from the RSC or RTRS because an error was detected in the Transaction section of the TCAP message.

System response:

None.

User response:

Check the PABORT CAUSE field for the nature of the problem.

Example:

XRATE:
>TRACE FORMAT
RESPONSE MSG = D70103

PKG TYPE ID = ABORT TRANS ID = 85FD90A7
PABORT CAUSE ID = D7 PABORT CAUSE = UNRECOGNIZED
PACKAGE TYPE ID

Response 5: Unable to Format Response

RESPONSE MSG =
E818EA16CF0183F211DF45060A03000000E3DF4A050200200000

UNABLE TO FORMAT QUERY RESPONSE

Explanation:

The XRATE tool was unable to format the response from the last query.

System action:

None.

User action:

Attempt to decode the raw hexadecimal stream.

Example:

```
XRATE:  
>TRACE FORMAT  
RESPONSE MSG =  
E420C7049182F9D0E818EA16CF0183F211DF45060A03000000E3DF  
4A0  
50200200000
```

UNABLE TO FORMAT RESPONSE

Response 6: The RAW Option

MSG RESPONSE = <hexadecimal stream>

Explanation:

The user requested only a raw hexadecimal dump of the last RTRS query response.

System action:

None.

User action:

None.

Example:

```
XRATE:  
>TRACE RAW  
RESPONSE MSG = E818EA16CF0183F211DF45060A03000000E3DF4A050200200000
```

AQ1277mm.aa15

Directories

One new directory will be added with this feature.

Table of new/modified directories

Table 3-208 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
SRAMCNTDIR	NEW	N/A	SN	RES

Accessing directory: SRAMCNTDIR

The directory SRAMCNTDIR will be added to allow the user to do several things with the added functionality of this feature. The commands will be discussed in the next section.

To access

SRAMCNT

To return to CI

QUIT

Commands

Four new commands will be added with this feature.

Table of New/modified commands**Table 3-209 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
CLEARCNT	NEW	N/A	SRAMCNTDIR
QUERYSNP	NEW	N/A	SRAMCNTDIR
REXCMINT	NEW	N/A	CMDIR
REXTST	CHANGED	N/A	CMDIR

Command name: CLRCNT**Command type**

Non - menu

Command target

SUPERNODE

Command availability

RES

Command description

The SRAM fault counters have been put in place to accurately keep track of errors occurring, such as parity errors, on accesses to SRAM. This command will clear a specified SRAM fault counter (s) thereby setting the counter or counters to a value of zero.

The counters have been put into place to keep track of faults in SRAM and prevent system and manual actions that may put the switch at risk such as swacting to a CPU that has been experiencing SRAM parity errors. In using the command a parameter is needed that will be the name of the counter or counters to be cleared.

Warning

This command should only be used by the appropriate support group. By clearing the counters, the controls put into place by this feature will not provide the protection intended. The controls include preventing a manual sync to a potentially faulty CPU, preventing REx tests from taking the switch out of sync and also preventing the switch from being manually swacted to a faulty CPU.

The counters should only be cleared after suspect hardware has been replaced, thereby allowing the new board to start from zero faults.

Command syntax

CLEARCNT <counter>

Parm: <counter>... {act,

inact,

act24,

act48,

inact24,

inact48,

dsdiff,

dsdiff24,

dsdiff48,

all}}

Parameter definitions

There will be no default for this command due to the nature of the command and its effect on the system.

Table 3-210 CLRCNT Parameter Defintions

PARAMETER	VALUE	DEFINITION
counter	act	act24 & act48
	inact	inact24 & inact48
	act24	act cpu's 24 hour counter
	inact24	inact cpu's 24 hour counter
	act48	act cpu's 48 hour counter
	inact48	inact cpu's 48 hour counter
	dsdiff	SRAM 24 & 48 hour dsdiff counters
	dsdiff24	SRAM 24 hour mismatch counter
	dsdiff48	SRAM 48 hour mismatch counter
	all	all counters

Responses

The user must respond to the Y/N query. Both responses are shown.

Response 1:

The [counter] will be cleared by this command. Are you sure? (Y/N)

Y

The SRAM counter specified has been cleared. Use the QUERYCNT command to query the counters.

Explanation:

The SRAM counter(s) has been cleared.

System action:

The specified counter (s) will be set to zero and a CM170 log will be generated.

User action:

No user action is required

Response 2:

The [counter] will be cleared by this command. Are you sure? (Y/N)

N

Explanation:

The SRAM counter(s) have not been cleared.

System action:

No system action took place.

User action:

No user action is required

Notes

Due to the fact that these counters are providing protection to the system from this type of fault the CLEARCNT command will generate a log indicating the user id of the person who initiated the clearing of the counters. This id will be recorded in the CM170 log recording the clearing of the counters..

Examples

- Clearcnt act (result: the active cpu's counters are cleared.)
- Clearcnt inact24 (result: the inactive cpu's 24 hour counter is cleared)

Command name: QUERYCNT**Command type**

Non - menu

Command target

SUPERNODE

Command availability

RES

Command description

The SRAM fault counters are put in place to keep track of the hardware errors encountered in accesses to SRAM. The thresholds here are for prevention of system or manual action that may put the switch at risk such as swacting to a side that has been experiencing faults. Please refer to the DD section for more information on either the counters or thresholds. This command will print out the current value of the counter(s) and/or threshold(s) specified.

Warning

This command provides information only and cannot cause a loss of service or data.

Command syntax

QUERYCNT [<counter>]

Parm: [<counter>... {act,

inact,

dsdiff,

act24,

inact24,

act48,

inact48,

dsdiff24,

dsdiff48,

all

minoralarm

preventrex

preventsyntax

preventsyntax}}]

Parameter definitions

The default, when no parameter is given, will be “all”.

Table 3-211 QUERYCNT Parameter Definitions

PARAMETER	VALUE	DEFINITION
counter	act	active cpu counters
	inact	inactive cpu counters
	dsdiff	24 & 48 hour dsdiff counters
	act24	act cpu's 24 hour counter
	inact24	inact cpu's 24 hour counter
	act48	act cpu's 48 hour counter
	inact48	inact cpu's 48 hour counter
	dsdiff24	SRAM 24 hour mismatch counter
	dsdiff48	SRAM 48 hour mismatch counter
	all	all counters
	minoralarm	Threshold for minor alarm
	preventrex	Threshold for preventing rex
	preventsyntax	Threshold for preventing sync
	preventsyntax	Threshold for preventing swact

Responses

Response:

Query SRAM fault counters

```

-----
Counter/Threshold Value
-----
act24      2
inact24    0
act48      3
inact48    0
dsdiff24   1
dsdiff48   2
minoralarm 1

```

preventrex 2
preventsyntax 3
preventswact 4

Explanation:

The SRAM fault counter (s) and/or threshold (s) will be listed along with their current values. All counters and thresholds are listed above, however, the counters queried will depend on the parameter entered with the command.

System action:

The value of the specified counter(s) and/or thresholds will be displayed.

User action:

No user action is required.

Notes

None

Examples

- Querycnt act (result: the active cpu's counters are displayed)
- Querycnt act24 (result: the active cpu's 24 hour counter is displayed)

Command name: QUERYSNP**Command type**

Non - menu

Command target

SUPERNODE

Command availability

RES

Command description

The SRAM snapshot was put into place to correct parity errors that occur in program store SRAM. This command will query the overall status of the SRAM snapshot and print out a report to the screen.

Command syntax

QUERYSNP

Parameter definitions

There are no parameters.

Responses

Response:

SRAM INVENTORY STATUS

```

Node Uses Snapshot      : YES
Audit Frequency         : 5 MINS
Audit Enabled           : YES
Inventory Status        : inv_initialized
Current Platform        : Series 20 CM
DRAM snapshot enabled   : YES
Predictive algorithm enabled : YES
DRAM Procedure enabled   : YES
Deact DRAM proc enabled : YES

```

INVENTORY MEMORY ALLOCATION

Block / Start Address	Stale	Protection	Base Address
0 / 0276 FE82	No	no_correction	0004 0000
1 / 0276 FE8C	No	no_correction	0004 8000
2 / 0276 FE96	No	dram_snapshot	0005 0000
3 / 0276 FEA0	No	no_correction	0005 8000
4 / 0276 FEAA	No	dram_procedure	0006 0000
5 / 0276 FEB4	No	no_correction	0006 8000
6 / 0276 FEBE	No	dram_procedure	0007 0000
7 / 0276 FEC8	No	no_correction	0007 8000
8 / 0276 FED2	No	dram_procedure	0008 0000
9 / 0276 FEDC	No	no_correction	0008 8000
10 / 0276 FEE6	No	dram_procedure	0009 0000

11/ 0276 FEF0	No	no_correction	0009 8000
12/ 0276 FEFA	No	dram_procedure	000A 0000
13/ 0276 FF04	No	no_correction	000A 8000
14/ 0276 FF0E	No	dram_procedure	000B 0000
15/ 0276 FF18	No	no_correction	000B 8000

Explanation:

The SRAM inventory is used to correct errors in SRAM program store and it must be in proper working order to serve this function. This command will allow the user to query the status of the inventory.

The 'Node uses snapshot' is used to verify to the user that this node is or is not equipped to use an SRAM snapshot. This should be used as an indicator of whether this node should be making use of a snapshot.

The audit is used to verify the contents of the snapshot against the contents of SRAM program store. The audit is normally enabled and set to run at a preselected rate, known as the normal audit frequency. For 68K processors, this frequency will be 5 minutes - for 88K processors, the normal audit frequency will be 10 minutes. The frequency may be changed to either a long audit (20 minutes for 68K, 30 minutes for 88K) or to a slow audit (30 minutes for 68K, 1 hour for 88K). The audit frequency will change to the slow audit rate if excessive SRAM traps occur during one audit cycle, and will return to the normal audit rate when no traps occur during a complete audit period. The long audit cycle will be used if a memory allocation error occurs during the initialization of the inventory, and will be set to the normal audit rate if memory is later successfully allocated.

The 'Inventory status' will be set to inv_initialized upon successful initialization of the inventory. This value of this field will change if errors are encountered during the operation of the SRAM inventory. Its value will reflect the type of error which occurred..

The 'current platform' indicates the type of processor currently in use on this switch. This field is put in this report to make it complete by possibly explaining the reason why the snapshot is not in use or by justifying the memory allocation.

The 'Inventory Memory Allocation' field describes in detail the allocation and protection for each inventory block. This section identifies the physical address at which each block is located, the type of coverage provided for the block, and the physical address in SRAM to which this block corresponds. As well, this section of the display indicates whether the data contained in this block has been found to be stale or not. Stale data indicates that a discrepancy between the contents of the block and the corresponding range in SRAM has been found, and the block is in the process of being updated.

System action:

The system will print out the information.

User action:

No user action is required.

Notes

This command, although available to the general user, is to be used primarily by support personnel in situations such as post - software upgrading or in post - outage analysis.

Examples

- Querysnp (result: the report will be printed.)

Command name: REXCMINT**Command type**

Non - menu

Command target

SUPERNODE, BRISC

Command availability

RES

Command description

The REXCMINT command provides the ability to schedule two classes of REx within a 7 day scheduling window. The two levels of intensity are defined as:

BASE - an image test, a sync and then a net swact

FULL - all the REx tests including the image test

Warning

Recommended procedure is to schedule the CM REx on a {Wed} for full intensity RExing while all other days are base intensity RExing. This is supported by the Markov modelling which weighs tests coverage vs. the amount of out-of-sync time which has an established probability of faults on the active processor.

Command syntax

```
{'REXCMINT - Routine Exercise method of operation is scheduled ',
  '    through this intensity control mechanism providing',
  '    the options of when to schedule full CM REx and ',
  '    base CM REx intensities.          ',
  ' Actions:',
  '  SETDAY - Set day(s) for full CM REx intensity',
  '  CLEARDAY - Clear day(s) for full CM REx intensity',
  '  STATUS - Show current status of CM REx intensity'
},
{'Action', parstr, noptnl, 0, 2,
  {'SETDAY',    {'Day', parstr, noptnl, 0, 6, {'MON', NIL},
                {'TUE', NIL},
                {'WED', NIL},
                {'THU', NIL},
                {'FRI', NIL},
                {'SAT', NIL},
                {'SUN', NIL}} } },
  {'CLEARDAY',  {'Day', parstr, noptnl, 0, 6, {'MON', NIL},
                {'TUE', NIL},
                {'WED', NIL},
                {'THU', NIL},
                {'FRI', NIL},
                {'SAT', NIL},
                {'SUN', NIL}} } },
  {'STATUS',    NIL}}
}}
```

Parameter definitions

Two main parameters are of interest here, namely, the day of the week for full intensity REx and the carry forward which has the ability to mark the next day if the current day failed to start execution of a full REx.

Table 3-212 REXCMINT Parameter Definitions

PARAMETER	VALUE	DEFINITION
dow_for_full_cm_rex	SET {Mon, Tue, Wed, Thu, Fri, Sat, Sun}	Day of week for full CM REx and note that multiple days can be set or cleared with this parameter. The day for full RExing is defaulted to {Wed}
carry_forward_full_cm_rex	{}	Initially, the value is initialized to an empty set of days, but if a day for full REx fails, then the appropriate day is stored in the carry forward.

Responses

The rexcmint command is made up of three commands, namely, the clearday, setday, and status. If we were to type in 'rexcmint status' we would get the following output:

Status of CM REx Intensity (b=base, f=full, c=carry_forward)

```
MonTueWedThu Fri Sat Sun
bb f      b      b      b      b
```

The user has the option of setting or clearing multiple days for full intensity REx on the CM.

For example, if you were to type in 'rexcmint clearday Wed' you would end up clearing Wednesday for full REx and if you typed in 'rexcmint status' you will end up with the following output on your MMI:

Status of CM REx Intensity (b=base, f=full, c=carry_forward)

```
MonTueWedThu Fri Sat Sun
bb b      b      b      b      b
```

Note that Wednesday has defaulted to base since this is the lowest level of REx intensity allowed by the CM REx Intensity Controller.

Another example of setting back the full intensity on a different day, you would type in 'rexcmin setday Mon' which would provides you with full intensity RExing on Monday now. If you typed in 'rexcmin status' you will end up with the following output on your MMI:

Status of CM REx Intensity (b=base, f=full, c=carry_forward)

Mon	Tue	Wed	Thu	Fri	Sat	Sun
fb	f	b	b	b	b	b

The responses discussed below are with respect to clearing the very last day of full intensity RExing. Note that running CM REx with only base intensity is not recommended.

Response 1:

You are about to clear all days for full REx. Are you sure (Y/N)

Y

Explanation:

A warning message will appear on the screen: 'WARNING!!! All days for full CM REx Intensity are cleared.' In other words, all the days are marked as base intensity REx and no days for full intensity REx exist now.

System action:

When System REx invokes CM REx, a warning log will be generated indicating that all days are marked as base intensity.

User action:

Only as a recommended form of action, a manual full REx should be done within the 7 day period at low traffic periods (CPUOCC<60%).

Response 2:

You are about to clear all days for full REx. Are you sure? (Y/N)

N

Explanation:

The day for full CM REx has not been cleared.

System action:

No system action took place.

User action:

No user action is required

Notes

Again, it is a recommended procedure to leave the {Wed} as the default and to run a full REX on a weekly basis.

Examples

- rexcmint clearday Wed - Clear full intensity REX for Wednesday
- rexcmint setday Mon - Set full intensity REX for Monday
- rexcmint status - Display the current status of the schedule for the intensity controller

Command name: REXTST**Command type**

Menu Command

Command target

SUPERNODE, BRISC

Command availability

RES

Command description

Today, the REXtst command provides functionality for executing classes of REX tests. The command will be modified to support a number of changes:

- Removal of the SHORT and LONG options (currently provides no functionality)
- Renaming the 'All' class to the 'Full' class (historic reasons)
- Addition of the 'Base' class (supports the CM REX Intensity Controller)
- Addition of a manual abort command 'TERMINATE' to provide field safe command for aborting the CM REX Controller execution (safer than abtk) since it allows for gracefull termination.

Warning

The 'abtk' is not a recommended (not supported) field command for aborting the execution of CM REx. Please use the manual terminate command presented here in the MMI document.

It is the user's responsibility to put the switch in the proper state after a manual abort. For example, if after the manual abort the switch is out-of-sync, and the user wishes to sync the switch, a manual action of sync must be done.

Command syntax

```
{{'RExTst - Run Routine Exercise Tests.'},
 {
  {'Class' , parstr, optnl, 0, 5,
   {{'FULL' , NIL},
    {'CPU' , NIL},
    {'MEM' , NIL},
    {'LINK', NIL},
    {'PMC' , NIL},
    {'BASE', NIL}
  }},
  {'Error action', parstr, optnl, 0, 1,
   {{'STOP' , NIL},
    {'CONTINUE', NIL},
   }},
  {'Success action', parstr, optnl, 0, 0,
   {{'RESETHITS', NIL}
  }},
  {'Options', parstr, optprt, 0, 3,
   {{'NOWAIT', NIL},
    {'NOPROMPT', NIL},
    {'RESETCOUNTS', NIL},
    {'VERBOSE' , NIL}},
   {'<RExTst terminate>', parstr, optnl, 0, 0
    {{'TERMINATE', NIL}}
  }
 }
```

Parameter definitions

TERMINATE - Will stop CM REx execution.

BASE - Class definition which defines the grouping of the image test and a next swact.

FULL - Class definition which defines the grouping of all REx tests.

No changes to the others.

Responses

The Full and Base classes will operate like all the other classes which have been previously documented in the NTP documentation. The response which requires some explanation is the manual abort command. The modified RExtst command enhances the users control over CM REx by allowing the user to abort the current execution of a REx class on the CM.

It should be well understood that the CM REx Controller will not terminate immediately, but rather has to wait for current REx test to complete its testing and return back with the result to the controller. Only at this point can the controller terminate gracefully and log the message.

For example, the user types in 'RExTst TERMINATE' and the current test will be allowed to complete so you will notice that a message saying 'RExTst terminating....' and when the controller receives the current return code back the message 'RExTst terminated.' will be issued to the MMI. Note again that the terminate will not be instantaneous because it must first finish the current REx test in the queue. Once when the test has completed, whether the switch is in-sync or out-of-sync, this will be the state of switch after the manual terminate.

Response:

RExTst terminating...

RExTst terminated.

Explanation:

The user has requested the RExTst Terminate command and the CM REx has terminated. No confirmation is required.

System action:

The controller will invoke its termination procedure as soon as the current REx test has finished execution. This termination procedure will take care of footprint and syslog transferal, alarming and releasing of resources.

User action:

Depends on the state of the switch. Again, as an example, if the switch is out-of-sync and no mismatches have occurred which will hinder a sync, then the user may want to do a manual sync to ensure the stability of the CM.

Notes

The user must be aware of the dangers when manually terminating CM REx. It is the users responsibility after the terminate to maintain the switches stability until the switch is back in sync.

Examples

- RExTst TERMINATE

Alarms

Alarm name: SramFI

Conditions required to raise the alarm

The alarm will be raised if the value of either the active or inactive 48 hour counter reaches the threshold for the minor alarm. The CM168 log will be generated as well when the minor alarm is raised. This log is discussed further in the LG section of this feature.

Duration of the alarm

The alarm will persist until the 48 hour counter is cleared. This will occur under one of two circumstances:

1. 48 hours passes with no additional SRAM faults. In this case, the counter will be cleared automatically by the system during the 9:00 AM audit. A log will be generated indicating the coutner was cleared by the system.
2. The counter is cleared manually. If this occurs, a log will be generated indicating the id of the person responsible for clearing the counter.

Clearing alarm procedure

It is suggested that this alarm not be cleared manually. If the counter is allowed to age for 48 hours, and no additional faults occur, this would tend to indicate the system has experienced a transient fault which was corrected and not repeated. If no additional faults occur within 48 hours, the counter will clear automatically. If additional faults are detected, an SRAM Major alarm will be raised. In this event, it is suggested the faulty processor be replaced. Once replaced, the sram counter for the new CPU board should be cleared manually.

Alarm name: SRAMFL

Conditions required to raise the alarm

The alarm will be raised if the threshold for the preventsync is met in the 48 hour counter.

Duration of the alarm

The alarm will persist until the 48 hour counter is cleared. This will only occur if the counter is cleared manually.

Clearing alarm procedure

When the card that resulted in the alarm has been changed the 48 hour counter for that cpu will need to be cleared in order to clear the alarm.

AR0387mm.aa13**Directories****Table of new/modified directories****Table 3-213 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
AINMAKERES	NEW		SUPERNODE	RES

Accessing directory: AINMAKERES**To access**

AINMKRES

To return to CI

QUIT

Commands**Table of New/modified commands****Table 3-214 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
AINMKRES	NEW		---
QUIT	NEW		AINTRACEDIR
HELP	NEW		AINTRACEDIR
ALL	NEW		AINTRACEDIR
RANGE	NEW		AINTRACEDIR

Command name: AINMKRES**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

Provides entry into the AINMKRES environment.

Warning

Restarts, table control, and SERVORD changes during the CONVERT process are NOT recommended

Command syntax

AINMKRES

Parameter definitions

No parameters

Responses**Response 1:**

AINMKRES:

WARNING: Restarts, table control, and SERVORD changes during the CONVERT process are NOT recommended

Explanation:

AINMKRES has been entered successfully.

System action:

None

User action:

None

Response 2:

Already in the AINMKRES increment

Explanation:

You are already in the AINMKRES environment.

System action:

None

User action:

None

Notes

None

Examples

To enter the AINMKRES environment:

```
CI:  
> AINMKRES  
AINMKRES:
```

WARNING: Restarts, table control, and SERVORD changes during the CONVERT process are NOT recommended

Command name: QUIT**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The QUIT command leaves the AINMKRES environment.

Warning

None

Command syntax

QUIT

Parameter definitions

No parameters

Responses**Response**

No.

System action:

None

User action:

None

Notes

None

Examples

AINMKRES:

> QUIT
CI:

Command name: HELP**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

To get a manu about the commands in AINMKRES environment.

Warning

None

Command syntax

HELP

Parameter definitions

None.

Responses**Response**

AINMKRES: Convert eligible AIN POTS to RES.

Options: ALL syntax: ALL

Convert all the eligible AIN POTS lines

to AIN RES lines .

ex. all

RANGE syntax: RANGE START <LEN> STOP <LEN>.

<LEN>: SITE 00 0 00 00

Convert eligible AIN POTS lines to RES

lines within START and STOP range.

SITE is optional.

ex. range start host 0 0 0 2

stop host 0 0 1 9

Explanation:

Shows the manu.

System action:

None

User action:

None

Notes

None

Examples

```
AINMKRES:  
> HELP
```

Command name: ALL**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The ALL command coverts all 1FR/MR POTS lines with AIN option to RES 1FR/MR lines.

Warning

None

Command syntax

ALL

Parameter definitions

None

Responses

The responses (outputs) are the same as MAKERES tool.

System action:

None

User action:

None

Notes

None

Examples

```
AINMKRES:  
>ALL REMOVE ALL
```

Command name: RANGE**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The RANGE command converts all 1FR/MR POTS lines with AIN option within the given range of LENS to RES lines.

Warning

None

Command syntax

```
RANGE START <LEN> STOP <LEN>
```

Parameter definitions

LEN : Line equipment numbers for the range.

Responses

See the MAKERES command

System action:

None

User action:

None

Notes

None

Examples

> RANGE START HOST 01 0 10 1 STOP 02 0 0 0

Alarms

None

Commands: TRAVER

The command affected by this feature is TRAVER.

Table of New/modified commands

Table 3-215 TRAVER New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	Changed	N/A	TRAVER

Command name: TRAVER**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

TRAVER is updated to be able to check and display the subscription information and verifications of AIN-specific translations and routing for AIN0.1 PODP Feature Code trigger.

TRAVER will issue a display message for RES lines about the subscription validation.

Warning

N/A

Command syntax

No change

Parameter definitions**Table 3-216 TRAVER Parameter Definitions**

PARAMETER	VALUE	DEFINITION

No change

Responses

TRAVER generates a message when it encounter a PODP Feature Code trigger. The message illustrates if the trigger is or NOT applicable the corresponding subscriber.

Figure 3-64 Examples of the TRAVER messages for PODPFEAT

Trigger R01 PODPFEAT is NOT applicable to office.
Trigger R01 PODPFEAT is applicable to RES line.

Notes

Refer to AR0449 MM section for the comments of using TRAVER.

Examples

Figure 3-65 A RES line triggers at PODP Feature Code trigger

```

>traver I 6215324 b360 b
TABLE IBNLINES
HOST 00 1 03 20 0 DT STN RES 6215324 299 $
TABLE LINEATTR
299 1FR NONE NT FR01 99 613 P621 L613 TSPS 10 NIL NILSFC NILLATA 0 NIL NIL 00 Y
RESG299 0 0 $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE DNATTRS
TUPLE NOT FOUND
TABLE DNGRPS
TUPLE NOT FOUND
TABLE IBNTFEAT
TUPLE NOT FOUND
TABLE CUSTSTN
TUPLE NOT FOUND
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFCTRIGGRP_ALL
AIN Orig Attempt TDP: no subscribed trigger.
TABLE NCOS
RESG299 0 0 0 RNCOS $
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA, FEATXLA, VACTRMT, AND
DIGCOL
RESG299 NXLA RXCMN200 RXCFNXXX 0 RES
TABLE DIGCOL
RES specified: RES digit collection
NCOS FEAT XLA name is NIL. Go to next XLA name.
TABLE IBNXLA: XLANAME RXCFNXXX
RXCFNXXX 360 FTR 3 AIN IMMED
AIN Info Collected TDP: no subscribed trigger.
TABLE TRIGGRP
LNPODPFC INFOANAL
. PODPFEAT ( DG PODPFDIG )$ NIL
Trigger R01 PODPFEAT is applicable to individual RES lines.
. . TABLE TRIGDIG
. . PODPFDIG PODPFEAT B360 PODPFEAT NOTRANS EVENT TCAP R01 SS7 AIN-
JAZZ DFLT $
. . . TABLE C7GTTYE
. . . AINJAZZ ANSI7 3 $
. . . TABLE KSETFEAT
. . . TUPLE NOT FOUND
. . . TABLE C7GTT
. . . AINJAZZ 6136215324 6136215324 SSNONLY (AINTST) $
AIN Info Analyzed TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Analyzed TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

+++ TRAVER: SUCCESSFUL CALL TRACE +++

```

Alarms

N/A

AR0912mm.ab12

Directories

MTCSWACTCI

Table of new/modified directories

Table 3-217New Directory

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
MTCSWACTCI	NEW		SuperNode and BRISC	RES

Accessing directory: MTCSWACTCI

To access

CI> MTCSWACTCI

To return to CI

> QUIT

Commands

MTCSWACT, MTCPOSTSWACT, RESUME, QUIT.

The following is the help message for the MTCSWACTCI directory.

MTCSWACTCI> help MTCSWACTCI

The MTCSWACTCI increment enables following commands:

MTCSWACT - Performs MTCSWACT.

MTCPOSTSWACT - Performs post SWACT recovery.

This command is invoked automatically after the SWACT without user intervention.

RESUME - Resumes MTCSWACT processing after the PAUSE interval.

QUIT - Exits the MTCSWACTCI increment.

Table of New/modified commands**Table 3-218 MTCSWACTCI New Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
MTCSWACT	NEW		MTCSWACTCI
MTCPOSTSWACT	NEW		MTCSWACTCI
RESUME	NEW		MTCSWACTCI
QUIT	NEW		MTCSWACTCI

Command name: MTCSWACT**Command type**

NON-MENU

Command target

SUPERNODE and BRISC

Command availability

RES

Command description

This command drops sync, performs specified restarts on the inactive CPU, switches activity of CPUs and optionally synchronizes the CPUs. The whole command takes approximately 20-25 minutes.

The user is guided through all phases of the command: the phase before dropping sync, the phase of switching of activity and the phase after SWACT on the newly active side.

After the switch drops sync and before the SWACT, the user has the option to suspend MTCSWACT processing for performing any required work during the out of sync window. Upon finishing the required work, the user must resume MTCSWACT processing.

This command should be used instead of restart commands. Maintenance activity, which requires restart, should be done before the MTCSWACT command. The MTCSWACT command, by invoking a restart on the inactive CPU, is eliminating call processing outage caused by ordinary restart commands.

Warning

None.

Command syntax

MTCSWACT <restart type> [PAUSE]

Parameter definitions

Table 3-219 MTCSWACT Command Parameters

PARAMETER	VALUE	DEFINITION
restart type	RELOAD	The switch drops sync and performs a reload restart on the inactive side.
	COLD	The switch drops sync and performs a cold restart on the inactive side.
	WARM	The switch drops sync and performs a warm restart on the inactive side. A COLD restart is also performed on the inactive side after the WARM restart.
pause option	No value	Default. MTCSWACT does not provide a pause before the switch of activity.
	PAUSE	Optional. MTCSWACT provides an out of sync time period before the switch of activity. This option should be used under supervision only.

Responses

The following lists all system responses that are generated by this command. They are generated by the MTCSWACT Base and by MTCSWACT applications. The responses are organized according to these two systems.

MTCSWACT Base responses include the following:

- Warning and reminder (if the PAUSE option is used)
- Dots

- Prompts for continuation (before dropping sync, before SWACT, and before sync)
- Running out of sync too long prompt
- NORESTARTSWACT output
- Automatic logging in of the MTCSWACT user
- ABORT message -- Active RESTART (optional)
- ABORT message -- Incorrect SYNC State (optional)
- Audit INFO message -- MTCPOSTSWACT execution (optional)
- Application message header
- Additional inactive COLD restart messages for a MTCSWACT WARM (optional)

MTCSWACT application responses include the following:

- Insync checks
- Before SWACT checks
- Insync steps
- Out of sync active steps
- Out of sync inactive steps
- After SWACT steps

The various type of responses that occur during a MTCSWACT mentioned above can be organized chronologically as follows. The sequence of responses shown below is for a successful MTCSWACT execution path.

- Warning (if the PAUSE option is used)
- Dots
- Insync checks
- Insync steps
- Prompt to continue before dropping sync
- Out of sync active and inactive steps
- RESUME reminder (if PAUSE option is used)
- Prompt to continue before SWACT
- Running out of sync too long prompt
- Before SWACT checks
- NORESTARTSWACT output

- Automatic logging in of the MTCSWACT user
- After SWACT steps
- Prompt to continue before sync

These responses are visible in SuperNode and BRISC.

MTCSWACT Base Responses

The visible responses provided by the MTCSWACT Base are described below.

PAUSE Warning Message

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> PAUSE
```

WARNING: MTCSWACT runs with the switch out of sync.

The PAUSE option will prolong this state.

...

Starting the out of sync pause. MTCSWACT processing is
suspended. To resume MTCSWACT, type RESUME from the
MTCSWACTCI directory.

Explanation:

If the user specified the PAUSE option in the MTCSWACT command, the system displays a warning to the MTCSWACT user at the beginning of MTCSWACT processing. Then the system continues with the regular MTCSWACT processing. Before the NORESTARTSWACT, the system suspends MTCSWACT works and allows the user to perform work around. To continue the MTCSWACT command after the workaround, the user must use the RESUME command.

Warning: If workarounds are required, it is recommended that the PAUSE option is used under supervision.

System action:

The user has entered a MTCSWACT command with the PAUSE option. The system displays a warning message to confirm that the user entered the PAUSE option. The message outlines the risks if the user specifies the PAUSE option. Then the system continues to execute the MTCSWACT processing, prints a message reminding the user to use the RESUME command to resume MTCSWACT processing. The system stops before the NORESTARTSWACT allowing the user to perform the workaround.

User action:

There is no action required from the user to response to the warning message. The user is expected to enter RESUME to resume MTCSWACT processing as soon as the user is done with the workaround.

Examples:

- The MTCSWACT user has workaround to be performed before the switch of activity.

```
MTCSWACTCI> MTCSWACT WARM PAUSE
```

```
WARNING: MTCSWACT runs with the switch out of sync.
```

```
The PAUSE option will prolong this state.
```

```
...
```

```
Starting the out of sync pause. MTCSWACT processing is  
suspended. To resume MTCSWACT, type RESUME from the  
MTCSWACTCI directory.
```

```
MTCSWACTCI> QUIT
```

```
% Perform work over the pause
```

```
>QUIT ALL; MTCSWACTCI; RESUME
```

```
MTCSWACT processing has been resumed.
```

```
A switch of activity is about to occur.
```

```
Do you wish to continue ?
```

```
Please confirm ("YES", "Y", "NO", or "N");
```

```
MTCSWACTCI> YES
```

```
$
```

```
TEAM1 Login on 1994/05/31 at 23:30:31.
```

- The user has some workaround to be performed before the switch of activity. In this example, the user does not want to continue with MTCSWACT processing after the pause.

```
MTCSWACTCI> MTCSWACT WARM PAUSE
```

```
WARNING: MTCSWACT runs with the switch out of sync.
```

```
The PAUSE option will prolong this state.
```

...

Starting the out of sync pause. MTCSWACT processing is
suspended. To resume MTCSWACT, type RESUME from the
MTCSWACTCI directory.
MTCSWACTCI> QUIT

% Perform work over the pause

>QUIT ALL; MTCSWACTCI; RESUME
MTCSWACT processing has been resumed.
A switch of activity is about to occur.
Do you wish to continue ?
Please confirm ("YES", "Y", "NO", or "N"):
MTCSWACTCI> NO
Executing MTCSWACT abort.

...

MTCSWACT command is aborted.
The switch is out of sync.

Dots on the MTCSWACT User's Terminal

In the below sections, three dots (". . .") are used as a shorthand notation to omit irrelevant intermediate output displayed by the system. If more than three dots are displayed in the example, they represent the dot output as displayed by the system's response.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
.....
.....
```

Explanation:

The system outputs dots to the MTCSWACT user's terminal to indicate that the MTCSWACT processing is in progress.

System action:

The dots indicates that the system is processing the MTCSWACT command. It is performing the execution of MTCSWACT applications. A dot and a space are displayed every 5 second interval. For every 30 dots output, a carriage return character is displayed to advance to the next line.

If there is any message to be output to the user, the dot outputting is stopped. The message is displayed on a new line. If MTCSWACT processing continues, the dot outputting is resumed on a new line on the MTCSWACT user's terminal.

Dot outputting is also suspended by the system to output any required prompt to continue to the user. These prompts to continue are described further in section "Prompts to Continue" on page 425.

User action:

There is no user action is required for this response. The dots are for informational purposes only.

Examples:

- In this example, dots are displayed while the system is executing the MTCSWACT command.

```
MTCSWACTCI> MTCSWACT COLD
```

```
.....
.....
```

- In this example, dots are displayed in between text messages.

```
MTCSWACTCI> MTCSWACT COLD
```

```
.....
```

```
Note: The following device(s) are in a bad state.
```

```
Correct the status to ISTB, OFFL or INSV.
```

```
Node Device
```

```
---- ----
```

```
14 DTC 0 0
```

```
Link 3 on MPC 3
```

```
.....
```

Unable to Generate Dot Warning Message

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

Note: MTCSWACT will proceed without dot output.

Explanation:

During the execution of the MTCSWACT command, if the system cannot create the process to output dots to the MTCSWACT user's terminal, a warning message is displayed.

System action:

The system generates the warning message and then continues to process the MTCSWACT command.

User action:

There is no user action is required for this response. The warning message is for informational purposes only.

Examples:

- In this example, the dot process cannot be created while the system is executing the MTCSWACT command.

```
MTCSWACTCI> MTCSWACT COLD
```

Note: MTCSWACT will proceed without dot output.

The switch is about to drop sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

```
>y
```

Dropping sync.

Prompts to Continue

The following section gives a lists of all different user prompts that occur during a MTCSWACT. Each prompt type will be explained in detail in each subsection below.

Dropsync Prompt**Format:**

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

The switch is about to drop sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

The system is requesting a response from the user. The user can continue the MTCSWACT command by letting the system drop sync or the user can stop and quit MTCSWACT command at this point.

System action:

The system has the following possible actions:

- If the user replies “YES”, MTCSWACT command continues, the switch will drop sync.
- If the user replies “NO”, MTCSWACT command is cancelled.

User action:

The MTCSWACT user has the following possible actions:

- Enter “YES” to resume the MTCSWACT processing.
- Enter “NO” to stop the MTCSWACT processing.

Examples:

The following gives some examples of all possible scenarios.

- The user wants to continue the MTCSWACT command:

```
MTCSWACTCI> MTCSWACT RELOAD
...
The switch is about to drop sync.
Do you wish to continue ?
Please confirm (“YES”, “Y”, “NO”, or “N”):
>YES
Dropping sync.
...
Running in simplex mode with active CPU 0.
...
Restart reload on inactive CPU is complete.
```

- The user wants to stop MTCSWACT command:

```
MTCSWACTCI> MTCSWACT COLD
...
The switch is about to drop sync.
Do you wish to continue ?
Please confirm (“YES”, “Y”, “NO”, or “N”):
>NO
Executing MTCSWACT abort.
...
MTCSWACT command is aborted.
```

Switch of Activity Prompt

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

A switch of activity is about to occur.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

After dropping sync, the MTCSWACT command is ready to switch activity of CPUs. Before the switching of activity, the user has a prompt to continue with the NORESTARTSWACT or the user can cancel the NORESTARTSWACT at this point. If the user selects to cancel the NORESTARTSWACT at this point, the switch remains in simplex mode (out of sync).

System action:

The system has the following possible actions:

- If the user types “YES”, the system continues with the MTCSWACT and performs a switch of activity. The user is automatically logged in on the newly active side of the switch after the NORESTARTSWACT.
- If the user types “NO”, the system stops the MTCSWACT. The system performs all necessary undo application steps to clean up after itself, displays a message to notify the MTCSWACT user, and quits the MTCSWACT CI.

User action:

The MTCSWACT user has the following possible actions:

- Type “YES” to proceed with the MTCSWACT processing. Upon successful completion of the switch of activity, the MTCSWACT user is logged in on a CI session immediately on the newly active side. There is no action required from the MTCSWACT user to log on.
- Type “NO” to stop the MTCSWACT processing. The switch is left running in simplex mode. The user has to manually sync up the switch if required.

Examples:

The following gives some examples of all possible results.

- The user wants to continue with the MTCSWACT processing:

```
MTCSWACTCI> MTCSWACT RELOAD
...
A switch of activity is about to occur.
Do you wish to continue ?
Please confirm (“YES”, “Y”, “NO”, or “N”):
MTCSWACTCI> YES
$
TEAM1 Login on 1994/05/31 at 23:30:31.
```

- The user does not want to continue with the MTCSWACT:

MTCSWACTCI> MTCSWACT COLD

...

A switch of activity is about to occur.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

MTCSWACTCI> NO

Executing MTCSWACT abort.

...

MTCSWACT command is aborted.

The switch is out of sync.

Sync Prompt

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

The switch is about to sync.

Do you wish to continue?

Please confirm ("YES", "Y", "NO", or "N");

Explanation:

After the successful completion of the NORESTARTSWACT and all MTCSWACT after SWACT steps, the system is ready to sync the switch. It is requesting a response from the MTCSWACT user to indicate whether or not the switch is to continue with the MTCSWACT processing to sync.

System action:

The system has the following possible actions:

- Upon receiving a positive response from the MTCSWACT user at this time, the system starts to sync the switch. Upon completing the sync operation, both CM RTIF windows shows "Sync" on the header line. On any MAP window under the CM level, the system displays that the switch has been synced up.
- Upon receiving a negative response from the MTCSWACT user at this time, the system stops the MTCSWACT processing, displays a message to notify the user and quits the MTCSWACT CI.

User action:

The MTCSWACT user has the following possible actions. In any case, the MTCSWACT command finishes.

- Type "YES" to put the switch in sync.
- Type "NO" to leave the switch out of sync.

Examples:

The following gives the examples of all possible outcome.

- The MTCSWACT user wants to MTCSWACT to sync the switch:

MTCSWACTCI> MTCSWACT RELOAD

...

The switch is about to sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>YES

Starting sync.

Synchronization successful.

MTCSWACT completes.

- The MTCSWACT user does not want MTCSWACT to sync the switch:

MTCSWACTCI> MTCSWACT RELOAD

...

The switch is about to sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>NO

The switch is still out of sync.

MTCSWACT completes.

Running Out of Sync Too Long Prompt

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

WARNING: The switch has been out of sync too long.

Service degradation could result if you continue with

the switch of activity. It is recommended that you quit

the MTCSWACTCI directory, resync the switch and re-enter

the MTCSWACT command again.

Total out of sync time: <hh:mm:ss.000>

Do you want to stop the current MTCSWACT processing ?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

The switch is about to perform a switch of activity, however, it has been running in out of sync mode for longer than the recommended 20 minutes. The user is given the option to stop the MTCSWACT processing because continuing with this command in this state could cause serious service degradation.

This prompt is applicable to all MTCSWACT command with or without the PAUSE option.

System action:

The system has the following actions:

- If the user replies "YES", MTCSWACT command processing is stopped. The executed steps are undo and MTCSWACT variables are reset. The system stops the MTCSWACT processing.
- If the user replies "NO", MTCSWACT command processing continues, the switch of activity will occur.

User action:

The user has the following actions:

- Enter "YES" to quit the MTCSWACTCI directory. If the user wants to re-execute the MTCSWACT command, the user has to manually sync the switch, re-enter the MTCSWACTCI directory and reinvoke the MTCSWACT command.
- Enter "NO" to continue with the MTCSWACT processing. A switch of activity is about to occur. The user is prompted to continue with the NORESTARTSWACT as described above.

Examples:

- The user wants to re-execute the MTCSWACT command from the beginning.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

WARNING: The switch has been out of sync too long.
Service degradation could result if you continue with
the switch of activity. It is recommended that you quit
the MTCSWACTCI directory, resync the switch and re-enter
the MTCSWACT command again.

Total out of sync time: 00:23:21.234

Do you want to stop the current MTCSWACT processing ?

Please confirm ("YES", "Y", "NO", or "N"):

> YES

Executing MTCSWACT abort.

...

MTCSWACT command is aborted.

- The user wants to continue with the switch of activity.

MTCSWACTCI> MTCSWACT WARM PAUSE

...

WARNING: The switch has been out of sync too long.
Service degradation could result if you continue with
the switch of activity. It is recommended that you quit
the MTCSWACTCI directory, resync the switch and re-enter
the MTCSWACT command again.

Total out of sync time: 00:23:21.234

Do you want to stop the current MTCSWACT processing ?

Please confirm ("YES", "Y", "NO", or "N"):

> NO

...

A switch of activity is about to occur.

...

NORESTARTSWACT Output

Format:

```
>MTC SWACT <Restart type> [PAUSE]
```

```
...
```

```
$
```

Explanation:

The system performs a NORESTARTSWACT as part of the MTC SWACT processing. The system displays a “\$” on all currently logged in users’ terminal as the result of the NORESTARTSWACT.

System action:

The system performs a switch of activity using the NORESTARTSWACT procedure.

User action:

There is no user action required by the user.

Examples:

- The system performs the NORESTARTSWACT as part of the MTCSWACT command processing.

```
>MTCSWACT WARM
```

```
...
```

```
$
```

Automatic Logging in of the MTCSWACT User**Format:**

```
>MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
$
```

```
TEAM1 Login on <date> at <time>.
```

Explanation:

After the NORESTARTSWACT, the MTCSWACT user (the one who invokes the MTCSWACT command) is automatically logged in to the switch by the system. If the system is successful, a message stating the MTCSWACT user name, date and time are displayed on the MTCSWACT user's terminal.

Other users who were logged in to the switch at the time the NORESTARTSWACT occurred will be prompted to logged in after the NORESTARTSWACT by the system with a "Please Login." message.

System action:

The system displays the login message on the MTCSWACT user's terminal and then continues to process the MTCSWACT command.

For other users who were logged on at the time the NORESTARTSWACT, the system displays a message “Please Login.” to invite them to log in.

User action:

There is no user action required from the MTCSWACT user at this time. The CI session is continuing.

Other users must login to continue their current CI after the NORESTARTSWACT.

Examples:

- The MTCSWACT user is automatically logged in on the newly active side after the NORESTARTSWACT is over.

```
>MTCSWACT WARM
```

```
...
```

```
$
```

```
TEAM1 Login on 1994/05/31 at 23:30:31.
```

- Other users are invited to log in with the message “Please Login.” on the newly active side after the NORESTARTSWACT is over.

```
>MTCSWACT WARM
```

```
...
```

```
$
```

```
Please Login.
```

Unable to Create the Command File to Automatically Execute the MTCPOSTSWACT Command

Format:

```
>MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
$
```

```
TEAM1 Login on <date> at <time>.
```

```
*****
```

```
MTCSWACT is NOT able to automatically execute MTCPOSTSWACT
```

Please enter the following commands:

MTCSWACTCI

MTCPOSTSWACT

Thank You

Explanation:

After the NORESTARTSWACT, the system should automatically execute the MTCPOSTSWACT command. However, if the system was not able to create a command file on SFDEV to automatically execute the MTCPOSTSWACT command, the system will not automatically execute the MTCPOSTSWACT command after the NORESTARTSWACT. A message requesting the user to manually execute the MTCPOSTSWACT command is displayed on the MTCSWACT user's terminal.

System action:

The system displays the message requesting manual MTCPOSTSWACT execution on the MTCSWACT user's terminal and then stops. If the user does not respond within 3 minutes, an audit, started by the system, will perform the MTCPOSTSWACT command.

User action:

The user is required to manually type in the MTCPOSTSWACT command to continue the MTCSWACT processing. If the user does not respond within 3 minutes, an audit, started by the system, will perform the MTCPOSTSWACT command.

Examples:

- The message is displayed on the MTCSWACT user's terminal on the newly active side after the NORESTARTSWACT is over.

```
>MTCSWACT WARM
...
$
TEAM1 Login on 1994/05/31 at 23:30:31.
*****
MTCSWACT is NOT able to automatically execute MTCPOSTSWACT
Please enter the following commands:
    MTCSWACTCI
    MTCPOSTSWACT
Thank You
*****
```

Abort message -- Active RESTART**Format:**

```
>MTCSWACTCI
The previous MTCSWACT was aborted by an Active side RESTART.
Cleanup has been performed.
< message telling user to SYNC the switch >
MTCSWACTCI:
>
```

Explanation:

During the previous MTCSWACT, an Active side RESTART occurred, which caused the MTCSWACT to be aborted.

MTCSWACT is intended to replace Active restarts with an Inactive restart and a SWitch of ACTivity. An Active restart is an invalid condition during the execution of a MTCSWACT command.

System action:

The system displays the abort message on the MTCSWACT user's terminal and then continues with normal execution of the command.

If the switch is not currently IN SYNC, then an additional message is displayed informing the user to SYNC the switch, as this is necessary to run MTCSWACT.

User action:

The Abort part of this message is information for the user. No action is required. The CI session is continuing.

If the SYNC part of the message is displayed, then the user should SYNC the switch prior to entering the MTCSWACT command.

Examples:

- The switch is INSYNC when the user enters the MTCSWACTCI command.

```
>MTCSWACTCI
```

```
The previous MTCSWACT was aborted by an Active side RESTART.
```

```
Cleanup has been performed.
```

```
MTCSWACTCI:
```

```
>
```

- The switch is OUT OF SYNC when the user enters the MTCSWACTCI command.

```
>MTCSWACTCI
```

```
The previous MTCSWACT was aborted by an Active side RESTART.
```

```
Cleanup has been performed.
```

```
The switch needs to be SYNCed manually.
```

```
SYNC the switch from the CM map level.
```

```
MTCSWACTCI:
```

```
>
```

Abort message -- incorrect switch SYNC state

Format:

```
MTCSWACT detected incorrect switch SYNC state (<sync state found>).
```

```
MTCSWACT aborted.
```

```
Cleanup has been performed.
```

```
< message telling user to SYNC the switch >
```

```
>
```

Explanation:

During the execution of the MTCSWACT command, MTCSWACT requires the switch sync state be IN SYNC or OUT OF SYNC depending on the phase of execution. However, other users or system actions could cause the switch sync state to change to a state which is incompatible with MTCSWACT processing.

MTCSWACT detects incorrect switch SYNC states, and aborts the MTCSWACT command if the state is NOT as required for MTCSWACT execution.

System action:

The system displays the abort message on the MTCSWACT user's terminal and terminates execution of the command.

If the switch is not currently IN SYNC, then an additional message is displayed informing the user to SYNC the switch, as this is necessary to run MTCSWACT.

User action:

The Abort part of this message is information for the user. No action is required. The CI session is continuing.

If the SYNC part of the message is displayed, then the user should SYNC the switch prior to entering the MTCSWACT command.

Examples:

- The switch detected an OUT OF SYNC state during MTCSWACT INSYNC execution.

MTCSWACT detected incorrect switch SYNC state (OUT OF SYNC).

MTCSWACT aborted.

Cleanup has been performed.

The switch needs to be SYNCed manually.

SYNC the switch from the CM map level.

- The switch detected an IN SYNC state during MTCSWACT OUT OF SYNC execution.

MTCSWACT detected incorrect switch SYNC state (IN SYNC).

MTCSWACT aborted.

Cleanup has been performed.

Audit INFO message -- MTCPOSTSWACT execution

Format:

Automatic user login and/or execution of the MTCPOSTSWACT failed.

MTCPOSTSWACT command has been executed by MTCSWACT audit.

< message telling user to SYNC the switch >

>

Explanation:

During the execution of the MTCSWACT command, if the user's terminal fails to recover on the new side after the SWACT, the automatic user login and execution of the MTCPOSTSWACT command will NOT take place.

To ensure that MTCPOSTSWACT is executed, MTCSWACT has an audit which detects whether or not MTCPOSTSWACT has been executed within 3 minutes of the SWACT. If NOT, the audit runs the MTCPOSTSWACT applications.

This message is displayed when the user enters MTCSWACTCI, or tries to run the MTCSWACT or MTCPOSTSWACT commands. The message is recorded and displayed at the next time the user enter any of the listed three commands.

System action:

This is an information message for the user. If the user was entering MTCSWACTCI when this message is displayed, the command continues normally. If the user was entering the MTCSWACT or MTCPOSTSWACT commands, these commands are aborted.

If the switch is not currently IN SYNC, then an additional message is displayed informing the user to SYNC the switch, as this is necessary to run MTCSWACT.

User action:

This message is information for the user. No action is required. The CI session is continuing.

If the SYNC part of the message is displayed, then the user should SYNC the switch prior to entering the MTCSWACT command.

Examples:

- The users terminal does NOT recover over the SWACT. The user finds another terminal, logs in several minutes after the SWACT, and enters MTCSWACTCI directory.

```
> mtcswactci
```

```
Automatic user login and execution of the MTCPOSTSWACT failed.
```

```
MTCPOSTSWACT command has been executed by MTCSWACT audit.
```

```
The switch needs to be SYNCed manually.
```

```
SYNC the switch from the CM map level.
```

```
MTCSWACTCI:
```

```
>
```

Application Message Header**Format:**

```
>MTCSWACTCI; MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
<Active/Inactive> Side Application Messages:
```

```
...
```

Explanation:

This message is displayed when the user executes a MTCSWACT command and if there is any message to be displayed by any SWACT applications. The above application message header indicates the side of the switch the application message was generated.

System action:

This is an information message for the user. The system will continue to output the application messages.

User action:

This message is information for the user.

Examples:

- The step to check the hardware generated some messages in the below example. These messages are generated on the active side.

```
> MTCSWACTCI COLD
```

```
.
```

Active Side Application Messages:

Note: The following device(s) are in a bad state.

Correct the status to ISTB, OFFL or INSV.

Node Device

```
---- -----
```

```
37  LDT PSAP 14 0
```

WARNING: Failure to correct the state of
call processing peripherals will result in
a significant increase in outage time.

Additional Inactive COLD Restart for a MTCSWACT WARM**Format:**

```
MTCSWACTCI> MTCSWACT WARM [PAUSE]
```

```
.
```

The switch is about to drop sync.

A COLD restart will be performed after the WARM restart on the
inactive CPU.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

```
>y
```

Dropping sync.

```
.
```

Running in simplex mode with active CPU 0.

```
.....  
.....  
Restart WARM on inactive CPU is completed.  
Performing restart COLD on the inactive CPU.  
.....  
.....  
Restart COLD on inactive CPU is completed.  
A switch of activity is about to occur.  
Do you wish to continue ?  
Please confirm ("YES", "Y", "NO", or "N"):  
>y  
..... $
```

Explanation:

If the user enters a MTCSWACT WARM command, a WARM restart will be performed on the inactive side. In addition to this WARM restart, a COLD restart is also performed to clean up the call processing data on the inactive side properly.

System action:

The system generates messages to indicate a COLD restart is being performed on the inactive side in addition to the WARM restart and then continues with the MTCSWACT execution.

User action:

There is no user action is required for this response. The messages are for informational purposes only.

Examples:

- In this example, messages indicating an additional COLD restart is performed on the inactive side when the system is executing the MTCSWACT command.

```
MTCSWACTCI> MTCSWACT WARM
```

```
.
```

The switch is about to drop sync.

A COLD restart will be performed after the WARM restart on the inactive CPU.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N");

```
>y
```

Dropping sync.

```
.
```

Running in simplex mode with active CPU 0.

```
.....
```

```
.....
```

Restart WARM on inactive CPU is completed.

Performing restart COLD on the inactive CPU.

```
.....
```

```
.....
```

Restart COLD on inactive CPU is completed.

A switch of activity is about to occur.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N");

>y
.....\$

MTCSWACT Application Responses

The following gives a list of all application responses that may occur over a MTCSWACT. The responses are organized according to the MTCSWACT application type.

There are two types of messages that are used in the system responses:

- Information messages: to be displayed at the next prompt to continue. These messages are for information purposes only. No action is required.
- Failure messages: to be displayed immediately during the MTCSWACT processing outlining the problem and solution required from the user. The user must correct the problem before the MTCSWACT processing can be resumed.

MTCSWACT Check Responses

The following section gives the responses of all MTCSWACT checks. If a check succeeds, the system continues to perform the next check or step in the MTCSWACT processing. If a step fails, the failure responses are displayed as described below.

Insync Checks

Insync checks are performed while the switch is in sync. The responses of MTCSWACT Insync checks are described below. If there are more than one response given by a check, all responses are listed in details for each check.

Switch is in Sync Check

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

Problem: The switch must be in sync before entering this command.

Solution: Please sync the switch and re-enter the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The user enters a MTCSWACT command when the switch is not in sync. The switch must be in sync in order to start the MTCSWACT command. A check to see if the switch is in sync is done as soon as the user enters the MTCSWACT command. The user must manually sync the switch before re-entering the MTCSWACT command.

System action:

The system just displays the failure message and stops the MTCSWACT command.

User action:

To continue with the MTCSWACT command, the user must manually sync the switch. This can be done by issuing the SYNC command under the CM level in MAPCI. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The user enters the MTCSWACT command while the switch is not in sync.

MTCSWACTCI> MTCSWACT WARM

Problem: The switch must be in sync before entering this command.

Solution: Please sync the switch and re-enter the MTCSWACT command.

MTCSWACT command is aborted.

Inactive side is not Jammed Check

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

Problem: The inactive side is jammed.

Solution: Please release the jam before re-entering
the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The user enters a MTCSWACT command while the inactive side of the switch is jammed. Since the MTCSWACT command will be performing a NORESTARTSWACT, the jam on the inactive side must be released in order for the NORESTARTSWACT to succeed.

System action:

The system just displays the failure message and stops the MTCSWACT command.

User action:

To proceed with the MTCSWACT command, the user must release the jam on the inactive. This is done by typing “\RELEASE JAM” on the inactive RTIF. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The user enters the MTCSWACT command while the inactive RTIF is jammed.

```
MTCSWACTCI> MTCSWACT COLD
```

...

Problem: The inactive side is jammed.

Solution: Please release the jam before re-entering
the MTCSWACT command.

MTCSWACT command is aborted.

No Currently Running System REX Test**Format:**

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: Failed to stop the following REX test(s):

<Node name>

.

.

Solution: Wait for the test(s) to complete before invoking the

MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The user enters a MTCSWACT command while the switch has currently running System REX test(s).

System action:

The system just displays the failure message naming all nodes that are currently running REX test and stops the MTCSWACT command.

User action:

To continue with the MTCSWACT command, the user re-enters the MTCSWACT command upon completion of the mentioned REX test(s).

Examples:

- The users enters a MTCSWACT command while the system has some nodes currently running REX test.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
Problem: Failed to stop the follwing REX test(s):
```

```
MS 0
```

```
LTC 1
```

```
DTC 0
```

```
Solution: Wait for the test(s) to complete before invoking the
```

```
MTCSWACT command.
```

```
MTCSWACT command is aborted.
```

No Hardware in Bad State Check**Format:**

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
Note: The following device(s) are in a bad state.
```

```
Correct the status to ISTB, OFFL or INSV.
```

```
Node Device
```

```
----
```

. .

. .

Device

. .

. .

WARNING: Failure to correct the state of
call processing peripherals will result in
a significant increase in outage time.

Explanation:

The displayed devices that are not in OK state (INSV or ISTB) or OFFLINE for the NORESTARTSWACT. An information message is displayed if there is any device found in bad state. The device header is optionally displayed depending on the type of the bad device found.

System action:

The system displays the list of device(s) in bad state for information purposes and then it continues with the MTCSWACT processing.

User action:

Before the switch drops sync, the user is prompted to continue. The user has the option of stopping the MTCSWACT to correct the status of the listed devices or continue with the MTCSWACT. Since the message is for informational purposes only, the user action is optional. However, an increase in outage time will result if there is any call processing peripheral in bad state.

Examples:

- The system displays the devices in bad states.

```
MTCSWACTCI> MTCSWACT RELOAD
```

```
...
```

Note: The following device(s) are in a bad state.

Correct the status to ISTB, OFFL or INSV.

Node Device

```
----
```

```
14 DTC 0 0
```

Link 3 on MPC 3

Device

```
-----
```

```
NIU0
```

WARNING: Failure to correct the state of
call processing peripherals will result in
a significant increase in outage time.

NORESTARTSWACT is Supported

Several failure responses are created in this check.

- Failure in checking NORESTARTSWACT supported procedure

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: Unable to allocate resources.

Solution: Please use other means to activate the maintenance.

MTCSWACT command is aborted.

Explanation:

The system is encountering problems in allocating resources used in the procedure to verify if the office supports NORESTARTSWACT.

System action:

The system displays the failure message and generates a log to record this problem. It stops the processing of MTCSWACT command.

User action:

If the user wants to continue with the MTCSWACT command, the following options can be considered:

- check the log to find out the cause of failing to allocate resources, fix the problem if possible.
- re-enter the MTCSWACT command at a later time.

Examples:

- There are problems allocating resources for the procedure to verify if NORESTARTSWACT is supported in the office.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: Unable to allocate resources.

Solution: Please use other means to activate the maintenance.

MTCSWACT command is aborted.

The office does not support NORESTARTSWACT

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: The following software does not support the MTCSWACT command.

OFFICETYPE - <Office type>

Solution: Please use other means to activate the maintenance.

MTCSWACT command is aborted.

Explanation:

The software of the switch does not support NORESTARTSWACT. Since, MTCSWACT is dependent on NORESTARTSWACT, the user cannot proceed with the MTCSWACT in this office.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

There is no user action expected for this response. The user should use other means to activate the maintenance activity.

Examples:

- The user enters a MTCSWACT command in an office that does not support NORESTARTSWACT.

MTCSWACTCI> MTCSWACT WARM

...

Problem: The following software does not support the MTCSWACT command.

OFFICETYPE - OFF200AVON

Solution: Please use other means to activate the maintenance.

MTCSWACT command is aborted.

Before SWACT Checks

The Before SWACT checks are performed just before the NORESTARTSWACT. The following failure responses are the results of the Before SWACT checks performed by the system.

Switch has Dropped Sync Check**Format:**

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

A switch of activity is about to occur.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

MTCSWACTCI> YES

Problem: The switch is in sync.

Solution: Please re-enter the MTCSWACT command to start
from the beginning.

MTCSWACT command is aborted.

Explanation:

The switch is about to perform a NORESTARTSWACT, however, the switch was manually put back in sync mode. The NORESTARTSWACT cannot occur if the switch is in sync. The user must enter the MTCSWACT command to start from the beginning.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must enter the command to invoke MTCSWACT from the beginning.

Examples:

- The switch is in sync mode when the system is about to perform a NORESTARTSWACT.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
A switch of activity is about to occur.
```

```
Do you wish to continue ?
```

```
Please confirm ("YES", "Y", "NO", or "N"):
```

```
MTCSWACTCI> YES
```

```
Problem: The switch is in sync.
```

```
Solution: Please re-enter the MTCSWACT command to start  
           from the beginning.
```

```
MTCSWACT command is aborted.
```

Not on Inactive Side Check**Format:**

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: Command is not valid on the inactive side.

Solution: Please enter the MTCSWACT command on the active side.

MTCSWACT command is aborted.

Explanation:

The switch is about to perform a NORESTARTSWACT, however, it finds out that the MTCSWACT was entered on the inactive side. The MTCSWACT cannot be entered on the inactive side.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

If the user wants to perform a MTCSWACT, re-enter the MTCSWACT command on the active side.

Examples:

- The user enters the MTCSWACT command on the inactive.

MTCSWACTCI> MTCSWACT WARM

...

Problem: Command is not valid on the inactive side.

Solution: Please enter the MTCSWACT command on the active side.

MTCSWACT command is aborted.

Inactive Side is not Jammed Check**Format:**

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

Problem: The inactive side is jammed.

Solution: Please release the jam before invoking the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The user enters a MTCSWACT command while the inactive side of the switch is jammed. Since the MTCSWACT command will be performing a NORESTARTSWACT, the jam on the inactive side must be released in order for the SWACT to succeed.

System action:

The system just displays the failure message and stops the MTCSWACT command.

User action:

If the user wants to proceed with the MTCSWACT command, the user must release the jam on the inactive. This is done by typing “\RELEASE JAM” on the inactive RTIF. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The user enters the MTCSWACT command while the inactive RTIF is jammed.

MTCSWACTCI> MTCSWACT COLD

Problem: The inactive side is jammed.

Solution: Please release the jam before invoking the MTCSWACT command.

MTCSWACT command is aborted.

Communication with Inactive CPU Check

Several failure responses are created in this check.

- Unable to establish communication with the mate CPU

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: Unable to establish communication with the inactive CPU.

Solution: Sync the switch and re-enter the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The system cannot establish communication with the mate CPU before performing the NORESTARTSWACT.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must check and correct the status of matelink. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The switch cannot establish communication to the mate CPU.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: Unable to establish communication with the inactive CPU.

Solution: Sync the switch and re-enter the MTCSWACT command.

MTCSWACT command is aborted.

— Problems communicating with the inactive CPU

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

Problem: Failed to determine software versions.

Solution: Sync the switch and re-enter the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The system cannot send a message to the inactive CPU to determine the software version on the inactive. Therefore, the switch cannot communicate with the inactive CPU.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must check and correct the status of matelink. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system is about to perform a NORESTARTSWACT and cannot send a message to the inactive CPU.

```
MTCSWACTCI> MTCSWACT WARM
```

...

Problem: Failed to determine software versions.

Solution: Sync the switch and re-enter the MTCSWACT command.

MS Check

Several failure responses are created in this check.

- Software version cannot be converted to MS condensed loadnames.

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: Failed to convert software version to MS condensed loadnames.

Solution: Contact the next level of support.

MTCSWACT command is aborted.

Explanation:

The software failed to convert the versions to MS condensed loadnames.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

If the user wants to continue with the MTCSWACT, check the matelink to ensure that it is working properly. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The loadnames cannot be converted to MS condensed loadnames.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
Problem: Failed to convert software version to MS condensed loadnames.
```

```
Solution: Contact the next level of support.
```

```
MTCSWACT command is aborted.
```

Failed to access MS information

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
Problem: Failed to obtain MS node protected data
```

```
Solution: Contact the next level of support.
```

```
MTCSWACT command is aborted.
```

Explanation:

The software failed to access the MS node protected data.

System action:

The system displays the failure message and stops the MTCSWACT processing. A MS log is generated providing more details for the failure.

User action:

If the user wants to continue with the MTCSWACT, check the MS logs for more details and then re-enter the MTCSWACT command.

Examples:

- The MS node protected data cannot be accessed.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: Failed to obtain MS node protected data.

Solution: Contact the next level of support.

MTCSWACT command is aborted.

Incompatible MS load

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

Problem: The load in MS <num>, <release>, is incompatible with the mate
CM load, <num> <release>

Solution: Load the MS with a compatible load before re-entering
the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The load in the MS is not compatible with the CM load in the mate.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must load in the MS with a compatible load. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The MS load is not compatible with the CM load in the mate.

```
MTCSWACTCI> MTCSWACT WARM
```

...

Problem: The load in MS 0, 36CJ, is incompatible with the mate CM
load, 37AP.

Solution: Load the MS with a compatible load before re-entering
the MTCSWACT command.

MTCSWACT command is aborted.

MS node is not in service

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: MS <number> is not in service.

Solution: Bring the MS into service (RTS MS <number>) before proceeding.

MTCSWACT command is aborted.

Explanation:

The load in the MS is not compatible with the CM load in the mate.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must load in the MS with a compatible load. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The MS load is not compatible with the CM load in the mate.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: MS 0 is not in service.

Solution: Bring the MS into service (RTS MS 0) before proceeding.

MTCSWACT command is aborted.

SRC Complete Recovery on Inactive Side Check**Format:**

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: System recovery is not finished on the inactive side.

Solution: Wait for 2 minutes and re-enter the MTCSWACT command again.

MTCSWACT command is aborted.

Explanation:

The inactive side has not completely recovered after dropping sync and performing the specified restart within the internally allowed timeout period.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

The user should wait for the specified time period before re-entering the MTCSWACT command again.

Examples:

MTCSWACTCI> MTCSWACT RELOAD

...

Problem: System recovery is not finished on the inactive side.

Solution: Wait for 2 minutes and re-enter the MTCSWACT command again.

MTCSWACT command is aborted.

MTCSWACT Same Release on Both Side Check**Format:**

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: MTCSWACT release on both sides do not match.

Solution: Ensure that the software load on both sides match.

MTCSWACT command is aborted.

Explanation:

The release version of MTCSWACT on both sides of the switch do not match. Since MTCSWACT starts when the switch is in sync, the version must match. This condition indicates that the software load on inactive side is no longer the same as that of the active side.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must ensure that the software load on both sides are the same. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The MTCSWACT release version on both sides do not match.

```
MTCSWACTCI> MTCSWACT RELOAD
```

```
...
```

```
Problem: MTCSWACT release on both sides do not match.
```

```
Solution: Ensure that the software load on both sides match.
```

```
MTCSWACT command is aborted.
```

MTCSWACT Step Responses

The section describes the responses created by MTCSWACT step applications.

Insync Steps

The following responses are created by the MTCSWACT Insync steps.

DISABLE AUTOIMAGE

This step has the following type of failure responses.

- Failed to stop the AUTODUMP response

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: Failed to stop the AUTODUMP currently occurring.

Solution: Stop the AUTODUMP manually or wait for it
to finish before invoking the MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The system fails to stop the AUTODUMP due to the inability to allocate resources to communicate with the AUTODUMP controller.

System action:

The system displays the failure message and stops the MTCSWACT processing. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

User action:

To continue with the MTCSWACT processing, the user must manually stop the AUTODUMP process or wait for it to finish. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system fails to stop the AUTODUMP.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: Failed to stop the AUTODUMP currently occurring.

Solution: Stop the AUTODUMP manually or wait for it
to finish before invoking the MTCSWACT command.

MTCSWACT command is aborted.

Failed to stop the AUTODUMP on a node response

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: Failed to stop the AUTODUMP currently being done on the <Node> node.

Solution: Stop the AUTODUMP manually or wait for it to finish before invoking the MTCSWACT command.
MTCSWACT command is aborted.

Explanation:

The system fails to communicate with the node that currently performing the AUTODUMP.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT processing, the user must manually stop the AUTODUMP process or wait for it to finish. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system fails to stop the AUTODUMP on a node.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: Failed to stop the AUTODUMP currently being done on the MS 0 node.

Solution: Stop the AUTODUMP manually or wait for it to finish before invoking the MTCSWACT command.

MTCSWACT command is aborted.

Failed to determine the DUMP controller response

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: Failed to determine DUMP controller.

Solution: Stop the AUTODUMP manually or wait for it
to finish before invoking the MTCSWACT command.
MTCSWACT command is aborted.

Explanation:

The system cannot find the current DUMP controller node.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT processing, the user must manually stop the AUTODUMP process or wait for it to finish. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system fails to find the AUTODUMP controller.

```
MTCSWACTCI> MTCSWACT WARM
...
Problem: Failed to determine DUMP controller.
Solution: Stop the AUTODUMP manually or wait for it
         to finish before invoking the MTCSWACT command.
MTCSWACT command is aborted.
```

SUSPEND SREX TEST

— Failed to suspend the REX test on the specified node

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
Problem: Failed to stop the following REX test(s):
<Node name> <Number> REX Test
Solution: Wait for the test(s) to complete before invoking the
         MTCSWACT command.
```

MTCSWACT command is aborted.

Explanation:

The system cannot suspend system REX tests running on the specified node(s).

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT processing, the user must manually stop the REX test or wait for it to finish. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system fails to determine the node name and number that has currently running system REX test.

```
MTCSWACTCI> MTCSWACT WARM
```

Problem: Failed to stop the following REX test(s):

LIM 3 0 REX Test

Solution: Wait for the test(s) to complete before invoking the

MTCSWACT command.

MTCSWACT command is aborted.

Failed to determine the nodename and number that currently has REX test running

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

Problem: Failed to stop the following REX test(s):

Undetermined REX test

Solution: Wait for the test(s) to complete before invoking the

MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The system cannot determine the nodename and number that currently has system REX tests running.

System action:

The system displays the failure message and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT processing, the user must manually stop the REX test or wait for it to finish. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system fails to suspend the system REX test.

```
MTCSWACTCI> MTCSWACT WARM
```

```
Problem: Failed to stop the following REX test(s):
```

```
Undetermined REX test
```

```
Solution: Wait for the test(s) to complete before invoking the  
          MTCSWACT command.
```

```
MTCSWACT command is aborted.
```

CHECK_DISK_VOLS

- Non-critical file(s) detected to be opened.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
Problem: The following file(s) are open and must be closed  
        before invoking the MTCSWACT command.
```

```
File: <filename> on <device>
```

```
Solution: Manually close the files.
```

```
MTCSWACT command is aborted.
```

Explanation:

The system has detected the listed file(s) are currently open. The file(s) must be manually closed for the MTCSWACT command to proceed.

System action:

The system displays the failure messages and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must manually close the specified files. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system finds a non-critical file that is currently open.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
Problem: The following file(s) are open and must be closed
         before invoking the MTCSWACT command.
```

```
File: ZARGON5 on DDU03
```

```
Solution: Manually close the files.
```

```
MTCSWACT command is aborted.
```

- Failed to determine the filename of the currently open non-critical file.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
Problem: The following file(s) are open and must be closed
         before invoking the MTCSWACT command.
```

```
File: Unknown on <device>
```

```
Solution: Manually close the files.
```

```
MTCSWACT command is aborted.
```

Explanation:

The system failed to determine the filename of the file is currently open on the listed device. The file(s) must be manually closed for the MTCSWACT command to proceed.

System action:

The system displays the failure messages and stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT, the user must manually close the specified device. The user must re-enter the MTCSWACT command again to continue the MTCSWACT processing.

Examples:

- The system failed to find the filename of a non-critical file that is currently open.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
Problem: The following file(s) are open and must be closed
         before invoking the MTCSWACT command.
```

```
File: Unknown on DISK1
```

```
Solution: Manually close the files.
```

```
MTCSWACT command is aborted.
```

SET MODCHECK OVERRIDE TABLES

There is no output message displayed by this step.

HALT ATT

There is no output displayed by this step.

SAVE MANB TRKS

There is no response displayed by this step.

MAINTAIN DCH STATUS

There is no response displayed by this step.

DTDETECT TRANSFER

Please refer to the MM section of feature AR1278 for the response of this step.

FRAME RELAY BILLING GENERATION

Please refer to the MM section of feature AR1278 for the response of this step.

HALT ACTIVE ALT

Please refer to the MM section of feature AR1278 for the response of this step.

MSWACT SAVE MB LINES

Please refer to the MM section of feature AR1278 for the response of this step.

DISABLE DCT

Please refer to the MM section of feature AR1278 for the response of this step.

REMOVE DTA

Please refer to the MM section of feature AR1278 for the response of this step.

SAVE MB TOPSPOS

There is no output displayed by this step.

Out of Sync Active Steps**SET SWCT AMA**

Please refer to the MM section of feature AR1278 for the response of this step.

Out of Sync Inactive Steps

The following Out of Sync Inactive steps are executed on the inactive side while the switch is out of sync and before the actual switch of activity. Their responses are described below.

VERIFY STORE**Format:**

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: There is not enough free DS on the inactive side
for MTCSWACT to proceed.

Currently <number>% of accessible DS is used.

Solution: Check the STOREFS setting in table DSLIMIT on the inactive.

MTCSWACT command is aborted.

Explanation:

The percentage of data store usage on the inactive side currently exceeds the maximum limit value set in the parameter MAX_DSUSED_PERCENT.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must check the STOREFS setting in table DSLIMIT to ensure the value is correct. Deallocate data store if possible. Re-enter the MTCSWACT command to continue when the data store problem is corrected.

Examples:

- The system exceeds the DS percentage of usage limit on the inactive side.

```
MTCSWACTCI> MTCSWACT WARM
```

...

Problem: There is not enough free DS on the inactive side
for MTCSWACT to proceed.

Currently 97% of accessible DS is used.

Solution: Check the STOREFS setting in table DSLIMIT on the inactive.

MTCSWACT command is aborted.

RESTORE MANB TRKS

This step does not display any output message.

After SWACT Steps

The after SWACT step output messages are performed under the execution of the MTCPOSTSWACT command. The MTCSWACT command invokes automatically the MTCPOSTSWACT command as part of its processing.

Please refer to the MTCPOSTSWACT command in section “Command name: MTCPOSTSWACT” on page 52 for more details.

Notes

The following lists all restrictions associated with the use of this MTCSWACT command:

- The maintenance activity to be activated using this MTCSWACT command must be applied while the switch is in sync. If the activity cannot be applied while in sync, MTCSWACT should not be used to activate the maintenance activity.
- MTCSWACT cannot be used for any software corruption recovery activity.
- This command cannot be used to activate any changes involving execs to the peripherals.

The following lists all conditions that must be satisfied in order to achieve success completion of this command:

- All billing records (AMA,...) must be rotated before using the MTCSWACT command.
- No important call (emergency 911 call,...) is in progress.

Command name: MTCPOSTSWACT

Command type

NON-MENU

Command target

SUPERNODE and BRISC

Command availability

RES

Command description

This command allows the user to manually start the execution of all after SWACT application steps on the newly active side while the switch is still out of sync. As soon as all after SWACT application steps are finished, the user is prompted for confirmation before the switch starts to sync up.

During the MTCPOSTSWACT processing, upon encountering any failure of the after SWACT application steps, the system will display a summary of the failed step(s) and details at the end of after SWACT step processing.

The MTCSWACT user is not expected to use this command under normal MTCSWACT processing since this part is already included in the work to be performed by the MTCSWACT command on the newly active side.

Warning

None.

Command syntax

MTCPOSTSWACT

Parameter definitions

There is no parameter required for this command.

Responses

The various type of responses that occur during a MTCPOSTSWACT mentioned above can be organized according to their time order as follows:

- After SWACT steps
- Prompt to continue before sync

These responses are visible in SuperNode and BRISC.

MTCSWACT Base Response**Dots on the MTCSWACT User's Terminal****Format:**

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
.....  
.....
```

Explanation:

The system outputs dots to the MTCSWACT user's terminal to indicate that the processing is in progress.

System action:

The system is processing the command. It is performing the execution of MTCSWACT applications. A dot and a blank space character are displayed every 5 second interval. For every 60 dots output, a carriage return character is displayed to advance to the next line.

If there is any message to be output to the user, the dot outputting is stopped. The message is displayed on a new line. If the processing continues, the dot outputting is resumed on a new line on the MTCSWACT user's terminal.

Dot outputting is also suspended by the system to output any required prompt to the user. The prompts are described further below.

User action:

There is no user action is required for this response. The dots are for informational purposes only.

Examples:

```
MTCSWACTCI> MTCSWACT COLD
...
$
TEAM1 Login on 1994/05/31/ at 23:30:31.
.....
.....
```

In this example, dots are displayed while the system is executing the MTCPOSTSWACT command.

Unable to Generate Dot Warning Message

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
..... $
```

```
TEAM3 Logged in on 1995/03/10 at 00:03:25.
```

```
<Log in Messages>
```

```
MTCSWACTCI:
```

```
Note: MTCSWACT will proceed without dot output.
```

Explanation:

During the execution of the MTCSWACT command, if the system cannot create the process to output dots to the MTCSWACT user's terminal, a warning message is displayed.

System action:

The system generates the warning message and then continues to process the MTCSWACT command.

User action:

There is no user action is required for this response. The warning message is for informational purposes only.

Examples:

- In this example, the dot process cannot be created while the system is executing the MTCSWACT command.

```
MTCSWACTCI> MTCSWACT COLD
```

```
...
```

```
The switch is about to drop sync.
```

```
Do you wish to continue ?
```

```
Please confirm ("YES", "Y", "NO", or "N"):
```

```
>y
```

```
Dropping sync.
```

```
Performing restart COLD on the inactive CPU.
```


.....

.....

Restart COLD on inactive CPU is completed.

A switch of activity is about to occur.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>y

..... \$

TEAM3 Logged in on 1995/03/10 at 00:03:25.

95/02/16 18:59 mtop04at ecomb

MTCSWACTCI:

Note: MTCSWACT will proceed without dot output.

Sync Prompt**Format:**

>MTCPOSTSWACT

...

The switch is about to sync.

Do you wish to continue?

Please confirm ("YES", "Y", "NO", or "N");

Explanation:

After the successful completion of the NORESTARTSWACT and all MTCSWACT after SWACT steps, the system is ready to sync the switch. It is requesting a response from the MTCSWACT user to indicate whether or not the switch is to continue with the MTCSWACT processing to sync.

This response is visible in SuperNode and BRISC.

System action:

The system has the following possible actions:

- Upon receiving a positive response from the MTCSWACT user at this time, the system will start to sync the switch. Upon completing the sync operation, both CM RTIF windows will show "Sync" on the header line. On any MAP window under the CM level, the system will display that the switch has been synced up.
- Upon receiving a negative response from the MTCSWACT user at this time, the system stops the MTCSWACT processing, displays a message to notify the user and quits the MTCSWACT CI.

User action:

The MTCSWACT user has the following possible actions:

- Enter "YES" to finish the MTCSWACT processing leaving the switch in sync.
- Enter "NO" to finish the MTCSWACT processing leaving the switch out of sync.

Examples:

The following gives some examples of all possible results.

- If the MTCSWACT user wants the system to sync the switch:

>MTCPOSTSWACT

...

The switch is about to sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>YES

Starting sync.

Synchronization successful.

- If the MTCSWACT user do not want the system to sync the switch:

>MTCPOSTSWACT

...

The switch is about to sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>NO

The switch is still out of sync.

MTCSWACT command is terminated.

MTCSWACT Application Responses

The following section describes all visible responses output by the MTCSWACT applications as the results of the MTCPOSTSWACT command.

After SWACT Steps

The following steps are executed after the NORESTARTSWACT.

ENABLE_AUTOIMAGE

There is no message displayed by this step.

DEALLOCATE_MODCHECK_OVERRIDE_TABLES

There is no message displayed by this step.

RESUME_SREX_TEST**Format:**

```
MTCSWACTCI> MTCPOSTSWACT
```

```
...
```

Note: Failed to resume system REX.

Please resume system REX manually using the REXTEST command.

Explanation:

The system cannot resume the system REX test. The test must be resumed manually by the user.

System action:

The system prints the information message and then continues to execute the next step.

User action:

The user should manually resume the system REX test using the REXTEST command.

Examples:

- The system cannot resume system REX test.

```
MTCSWACTCI> MTCPOSTSWACT
```

```
...
```

Note: Failed to resume system REX.

Please resume system REX manually using the REXTEST command.

OMMASTER_RESTORE**Format:**

```
MTCSWACTCI> MTCPOSTSWACT
```

```
...
```

Note: The OMMASTER command is currently in use.

The OM process will have to be started manually.

Explanation:

The OMMASTER command is currently being used by another user. MTCSWACT cannot execute this step right now.

System action:

The system displays the informational message and continues to the next step.

User action:

The user issues the command OMMASTER manually to start the OM process.

Examples:

- The OMMASTER step cannot be executed at the current time.

```
MTCSWACTCI> MTCPOSTSWACT
```

...

Note: The OMMASTER command is currently in use.

The OM process will have to be started manually.

RESUME_ATT**Format:**

```
MTCSWACTCI> MTCPOSTSWACT
```

...

Note: Cannot activate Automatic Trunk Testing (ATT).

Please activate ATT manually in MAP under TRKS.

Explanation:

The system cannot resume Automatic Trunk Testing. The user is requested to activate it manually by using the command RUNATT of the ATT level which is under the TRKS level of MAPCI.

System action:

The system displays the informational message and then continues on to the next step.

User action:

To correct the problem, the user can use the command RUNATT of the ATT level which is under the TRKS level in MAPCI.

Examples:

The system cannot resume Automatic Trunk Testing.

```
MTCSWACTCI> MTCPOSTSWACT
```

```
...
```

Note: Cannot activate Automatic Trunk Testing (ATT).

Please activate ATT manually in MAPCI under TRKS.

RESTORE_DTDETECT

There is no message generated by this step.

MSWACT_RESTORE_MB_LINES

Please refer to the MM section of feature AR1278 for the response of this step.

DCT_RESUME

Please refer to the MM section of feature AR1278 for the response of this step.

RESTORE_MB_TOPSMP

There is no message displayed by this step.

Notes

The MTCSWACT user is not expected to use this command under normal MTCSWACT processing since this part is already included in the work of the MTCSWACT command to be performed on the newly active side.

Command name: RESUME**Command type**

NON-MENU

Command target

SUPERNODE and BRISC

Command availability

RES

Command description

This command allows the MTCSWACT user to resume the MTCSWACT processing after the workaround has been finished. The user must have already invoked a MTCSWACT command with a PAUSE option. This command resumes the MTCSWACT processing at the point before the NORESTARTSWACT.

Warning

None.

Command syntax

RESUME

Parameter definitions

There is no parameter required for this command.

Responses

The various type of responses that occur during a MTCSWACT mentioned above can be organized according to their time order as follows:

- Prompt to continue before SWACT
- Running out of sync too long prompt (if applicable)
- Before SWACT checks
- NORESTARTSWACT output
- Automatic logging in of the MTCSWACT user
- After SWACT steps
- Prompt to continue before sync

These responses are visible in SuperNode and BRISC.

MTCSWACT Base Responses

The visible responses provided by the MTCSWACT Base are described below.

Dots on the MTCSWACT User's Terminal

In the below sections, three dots (". . .") are used as a shorthand notation to omit irrelevant intermediate output displayed by the system. If more than three dots are displayed in the example, they represent the dot output as displayed by the system's response.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
.....  
.....
```

Explanation:

The system outputs dots to the MTCSWACT user's terminal to indicate that the MTCSWACT processing is in progress.

System action:

The dots indicates that the system is processing the MTCSWACT command. It is performing the execution of MTCSWACT applications. A dot and a blank space character are displayed every 5 second interval. For every 60 dots output, a carriage return character is displayed to advance to the next line.

If there is any message to be output to the user, the dot outputting is stopped. The message is displayed on a new line. If MTCSWACT processing continues, the dot outputting is resumed on a new line on the MTCSWACT user's terminal.

Dot outputting is also suspended by the system to output any required prompt to continue to the user. These prompts to continue are described further in section "Prompts to Continue" on page 425.

User action:

There is no user action is required for this response. The dots are for informational purposes only.

Examples:

- In this example, dots are displayed while the system is executing the MTCSWACT command.

```
MTCSWACTCI> MTCSWACT COLD
```

```
.....  
.....
```

- In this example, dots are displayed in between text messages.

```
MTCSWACTCI> MTCSWACT COLD
```

```
.....
```

Note: The following device(s) are in a bad state.

Correct the status to ISTB, OFFL or INSV.

Node Device

```
-----
```

```
14 DTC 0 0
```

```
Link 3 on MPC 3
```

```
.....
```

Prompts to Continue

The following section gives a lists of all different user prompts that occur during a MTCSWACT. Each prompt type will be explained in detail in each subsection below.

SWACT Prompt

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

A switch of activity is about to occur.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

After dropping sync, the MTCSWACT command is ready to switch activity of CPUs. Before the switching of activity, the user has a prompt to continue with the NORESTARTSWACT or the user can cancel the NORESTARTSWACT at this point. If the user selects to cancel the NORESTARTSWACT at this point, the switch remains in simplex mode (out of sync).

System action:

The system has the following possible actions:

- If the user types "YES", the system continues with the MTCSWACT and performs a switch of activity. The user is automatically logged in on the newly active side of the switch after the NORESTARTSWACT.
- If the user types "NO", the system stops the MTCSWACT. The system performs all necessary undo application steps to clean up after itself, displays a message to notify the MTCSWACT user, and quits the MTCSWACT CI.

User action:

The MTCSWACT user has the following possible actions:

- Type “YES” to proceed with the MTCSWACT processing. Upon successful completion of the switch of activity, the MTCSWACT user is logged in on a CI session immediately on the newly active side. There is no action required from the MTCSWACT user to log on.
- Type “NO” to stop the MTCSWACT processing. The switch is left running in simplex mode. The user has to manually sync up the switch if required.

Examples:

The following gives some examples of all possible results.

- The user wants to continue with the MTCSWACT processing:

```
MTCSWACTCI> MTCSWACT RELOAD
...
A switch of activity is about to occur.
Do you wish to continue ?
Please confirm (“YES”, “Y”, “NO”, or “N”):
MTCSWACTCI> YES
$
TEAM1 Login on 1994/05/31 at 23:30:31.
```

- The user does not want to continue with the MTCSWACT:

```
MTCSWACTCI> MTCSWACT COLD
...
A switch of activity is about to occur.
Do you wish to continue ?
Please confirm (“YES”, “Y”, “NO”, or “N”):
MTCSWACTCI> NO
Executing MTCSWACT abort.
...
MTCSWACT command is aborted.
The switch is out of sync.
```

Sync Prompt

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

The switch is about to sync.

Do you wish to continue?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

After the successful completion of the NORESTARTSWACT and all MTCSWACT after SWACT steps, the system is ready to sync the switch. It is requesting a response from the MTCSWACT user to indicate whether or not the switch is to continue with the MTCSWACT processing to sync.

System action:

The system has the following possible actions:

- Upon receiving a positive response from the MTCSWACT user at this time, the system starts to sync the switch. Upon completing the sync operation, both CM RTIF windows shows "Sync" on the header line. On any MAP window under the CM level, the system displays that the switch has been synced up.
- Upon receiving a negative response from the MTCSWACT user at this time, the system stops the MTCSWACT processing, displays a message to notify the user and quits the MTCSWACT CI.

User action:

The MTCSWACT user has the following possible actions. In both cases, the MTCSWACT command finishes.

- Type "YES" to put the switch in sync.
- Type "NO" to leave the switch out of sync.

Examples:

The following gives the examples of all possible outcome.

- The MTCSWACT user wants to MTCSWACT to sync the switch:

MTCSWACTCI> MTCSWACT RELOAD

...

The switch is about to sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>YES

Starting sync.

Synchronization is successful.

MTCSWACT completes.

- The MTCSWACT user does not want MTCSWACT to sync the switch:

MTCSWACTCI> MTCSWACT RELOAD

...

The switch is about to sync.

Do you wish to continue ?

Please confirm ("YES", "Y", "NO", or "N"):

>NO

The switch is still out of sync.

MTCSWACT completes.

Running Out of Sync Too Long Prompt

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

WARNING: The switch has been out of sync too long.

Service degradation could result if you continue with

the switch of activity. It is recommended that you quit

the MTCSWACTCI directory, resync the switch and re-enter

the MTCSWACT command again.

Total out of sync time: <hh:mm:ss.000>

Do you want to stop the current MTCSWACT processing ?

Please confirm ("YES", "Y", "NO", or "N"):

Explanation:

The switch is about to perform a switch of activity, however, it has been running in out of sync mode for longer than the recommended 20 minutes. The user is given the option to stop the MTC SWACT processing because continuing with this command in this state could cause serious service degradation.

This prompt is applicable to all MTC SWACT command with or without the PAUSE option.

System action:

The system has the following actions:

- If the user replies “YES”, MTC SWACT command processing is stopped. The executed steps are undo and MTC SWACT variables are reset. The system stops the MTC SWACT processing.
- If the user replies “NO”, MTC SWACT command processing continues, the switch of activity will occur.

User action:

The user has the following actions:

- Enter “YES” to quit the MTC SWACTCI directory. If the user wants to re-execute the MTC SWACT command, the user has to manually sync the switch, re-enter the MTC SWACTCI directory and reinvoke the MTC SWACT command.
- Enter “NO” to continue with the MTC SWACT processing. A switch of activity is about to occur. The user is prompted to continue with the NORESTARTSWACT as described above.

Examples:

- The user wants to re-execute the MTC SWACT command from the beginning.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
WARNING: The switch has been out of sync too long.
```

```
Service degradation could result if you continue with
```

the switch of activity. It is recommended that you quit the MTCSWACTCI directory, resync the switch and re-enter the MTCSWACT command again.

Total out of sync time: 00:23:21:22.234

Do you want to stop the current MTCSWACT processing ?

Please confirm ("YES", "Y", "NO", or "N"):

> YES

Executing MTCSWACT abort.

...

MTCSWACT command is aborted.

- The user wants to continue with the switch of activity.

MTCSWACTCI> MTCSWACT WARM PAUSE

...

WARNING: The switch has been out of sync too long.

Service degradation could result if you continue with

the switch of activity. It is recommended that you quit

the MTCSWACTCI directory, resync the switch and re-enter

the MTCSWACT command again.

Total out of sync time: 00:23:21:22.234

Do you want to stop the current MTCSWACT processing ?

Please confirm ("YES", "Y", "NO", or "N"):

> NO

...

A switch of activity is about to occur.

...

NORESTARTSWACT Output

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...
\$

Explanation:

The system performs a NORESTARTSWACT as part of the MTCSWACT processing. The system displays a “\$” on all currently logged in users’ terminal as the result of the NORESTARTSWACT.

System action:

The system performs a switch of activity using the NORESTARTSWACT procedure.

User action:

There is no user action required by the user.

Examples:

- The system performs the NORESTARTSWACT as part of the MTCSWACT command processing.

```
MTCSWACTCI> MTCSWACT WARM  
...  
$
```

Automatic Logging in of the MTCSWACT User**Format:**

```
>MTCSWACT <Restart type> [PAUSE]  
...  
$  
TEAM1 Login on <date> at <time>.
```

Explanation:

After the NORESTARTSWACT, the MTCSWACT user (the one who invokes the MTCSWACT command) is automatically logged in to the switch by the system. If the system is successful, a message stating the MTCSWACT user name, date and time are displayed on the MTCSWACT user’s terminal.

Other users who were logged in to the switch at the time the NORESTARTSWACT occurred will be prompted to log in after the NORESTARTSWACT by the system with a “Please Login.” message.

System action:

The system displays the login message on the MTCSWACT user’s terminal and then continues to process the MTCSWACT command.

For other users who were logged on at the time the NORESTARTSWACT, the system displays a message “Please Login.” to invite them to log in.

User action:

There is no user action required from the MTCSWACT user at this time. The CI session is continuing.

Other users must login to continue their current CI after the NORESTARTSWACT.

Examples:

- The MTCSWACT user is automatically logged in on the newly active side after the NORESTARTSWACT is over.

```
>MTCSWACT WARM
```

```
...
```

```
$
```

```
TEAM1 Login on 1994/05/31 at 23:30:31.
```

- Other users are invited to log in with the message “Please Login.” on the newly active side after the NORESTARTSWACT is over.

```
>MTCSWACT WARM
```

```
...
```

```
$
```

```
Please Login.
```

MTCSWACT Application Responses

The following gives a list of all application responses that may occur over a MTCSWACT. The responses are organized according to the MTCSWACT application type.

There are two types of messages that are used in the system responses:

- Information messages: to be displayed at the next prompt to continue. These messages are for information purposes only. No action is required.
- Failure messages: to be displayed immediately during the MTCSWACT processing outlining the problem and solution required from the user. The user must correct the problem before the MTCSWACT processing can be resumed.

The system will be performing the MTCSWACT Before SWACT checks and the MTCSWACT After SWACT steps.

Notes

Not applicable.

Command name: QUIT**Command type**

NON-MENU

Command target

SUPERNODE and BRISC

Command availability

RES

Command description

This command exits from the MTCSWACTCI directory.

Warning

None.

Command syntax

MTCSWACTCI> QUIT

Parameter definitions

There is no parameter required for this command.

Responses

Format:

MTCSWACTCI> QUIT

Explanation:

The user has exited from the MTCSWACTCI directory.

System action:

The system exits from the MTCSWACTCI directory and returns to previous CI level before the MTCSWACTCI directory was entered.

User action:

None.

Examples:

MTCSWACTCI> QUIT

Notes

Not applicable.

Alarms

Alarm name:

Not applicable.

Conditions required to raise the alarm

Not applicable.

Duration of the alarm

Not applicable.

AR0970mm.ab13**Directories****Table of new/modified directories****Table 3-220 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
C7RTR_DIR	Changed		Supernode	RES

Accessing directory: C7RTR_DIR**To access**

From CI prompt, or any MAP level type:

C7RTR

To return to CI

Quit

Commands**Table of New/modified commands****Table 3-221 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QUERY_MAX_RTESETS	NEW		C7RTR_DIR
SET_MAX_RTESETS	NEW		C7RTR_DIR

Command name: QUERY_MAX_RTESETS**Command type**

Non-menu

Command target

Supernode

Command availability

Res

Command description

This command is provided to display the maximum number of tuples which will be allowed in table C7RTESET when external routing has been activated, MTP tables have been removed from DTC7s, and there are no LIU7s with less than 8 Megabytes of memory.

Warning

None.

Command syntax

QUERY_MAX RTESETS

Parameter definitions

This command has no parameters.

Responses**Response**

The maximum number of tuples in table C7RTESET when
External Routing is activated and MTP databases have been
removed from CCS7 DTCs is 511.

Explanation:

The response indicates the number of tuples allowed in table C7RTESET if external routing has been activated, MTP tables have been removed from DTC7s, and no LIU7s have less than 8 Megabytes of memory.

System action:

None.

User action:

None.

Notes

None.

Examples

There is only one response to this command. Please see “ Response” on page 507.

Command name: SET_MAX_RTESETS**Command type**

Non-menu

Command target

Supernode

Command availability

Res

Command description

This command is provided to increase the maximum number of tuples which will be allowed in table C7RTESET when external routing has been activated, MTP tables have been removed from DTC7s, and there are no LIU7s with less than 8 Megabytes of memory.

Warning

None.

Command syntax

```
SET_MAX_RTESETS { 511 | 1023 | 2047 }
```

Parameter definitions

Table 3-222 SET_MAX_RTESETS Parameter Definitions

PARAMETER	VALUE	DEFINITION
New maximum	511 1023 2047	The new maximum number of tuples in table C7RTESET when external routing is activated, MTP tables have been removed from DTC7s, and there are no LIU7s with less than 8 Megabytes of memory.

Responses

Response : Success

Assuming that the command entered was “SET_MAX_RTESETS 1023”, and that the maximum prior to entering the command was 511, the following response would be generated:

The maximum number of tuples in table C7RTESET when
External Routing is activated and MTP databases have been
removed from CCS7 DTCs is 1023.

Explanation:

The response indicates the new maximum number of tuples allowed in table C7RTESET if external routing has been activated, MTP tables have been removed from DTC7s, and no LIU7s have less than 8 Megabytes of memory.

System action:

None.

User action:

None.

Response : Failure

An error message will be generated if an attempt is made to decrease the maximum. The tool only allows an increase.

Assuming that the command entered was “SET_MAX_RTESETS 1023”, and that the maximum prior to entering the command was 2047, the following response would be generated:

The new maximum (1023) is less than the existing maximum (2047).

This command only allows the maximum to increase.

The maximum number of tuples in table C7RTESET when
External Routing is activated and MTP databases have been
removed from CCS7 DTCs is 2047.

Explanation:

The response indicates that new maximum exceeds the existing maximum and that the attempt to decrease the maximum has failed.

System action:

None.

User action:

None.

Notes

None.

Examples

Please see “Response : Success” on page 509, and “Response: Failure” on page 1094 for examples.

Alarms

No alarms are generated by the new commands.

Alarm name:**Conditions required to raise the alarm****Duration of the alarm**

AR1029mm.aa04**Directories**

PROGDIR

Table of new/modified directories

Not Applicable.

Accessing directory:

Not Applicable.

To access

Not Applicable.

To return to CI

Not Applicable.

Commands**Table of New/modified commands****Table 3-223 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
COMPLF	NEW		PROGDIR
DECOMPLF	NEW		PROGDIR
DUMP	CHANGED		PROGDIR

Command name: COMPLF**Command type**

Non-Menu.

Command target

SuperNode.

Command availability

NONRES.

Command description

Some Series III nodes (including all ASUs) register with the DUMP system for compression. When one of these is dumped, its loadfile is automatically compressed. This command is used to manually compress a Series III loadfile image. It is provided as an emergency tool in the event something goes wrong with the automatic loadfile compression. Its output is the compressed image file.

Warning

Most nodes are not capable of booting a compressed loadfile. Compressed loadfiles can only be booted into nodes that have registered with the DUMP system. A MANUALLY COMPRESSED LOAD WILL LIKELY NOT BE BOOTABLE. Only those nodes which have a downloadable loader equipped to decompress load records can boot compressed images.

COMPLF: Compress a load file (image) into the standard bootable

format. Warning: Not all nodes are equipped to decompress image files. In some cases a compressed image may not be bootable.

PARMS: <Input file name> FILE

[<Output device name> STRING]

[<Output file name> STRING]

Parameter definitions

Table 3-224 COMPLF Parameter Definitions

PARAMETER	VALUE	DEFINITION
Input file name	alphanumeric	The file name of the file to be compressed. The volume on which the input file resides must be listed before this command can be used.
Output file device	alphanumeric	The name of the volume or device on which the output file should be written. This is an optional parameter. If it is not specified, the file will be written to the volume on which the input file resides.

Table 3-224 COMPLF Parameter Definitions

PARAMETER	VALUE	DEFINITION
Output file name	alphanumeric	The filename of the compressed file. This is an optional parameter. If no output file name is specified, the output file name is the input file name appended by '_Z'

Command name: DECOMPLF**Command type**

Non-Menu.

Command target

SuperNode.

Command availability

NONRES.

Command description

Some Series III nodes (including all ASUs) register with the DUMP system for compression. When one of these is dumped, its loadfile is automatically compressed. This command is used to manually decompress a Series III loadfile image. It is provided as an emergency tool in the event something goes wrong with the automatic loadfile compression. Its output is the uncompressed image file.

Warning

Not Applicable.

Command syntax

DECOMPLF: Decompress a compressed load file (image) into the standard uncompressed bootable format. The input file name must end in '_Z' to indicate a compressed image, the command is aborted.

PARMS: <Input file name> FILE

[<Output device name> STRING]

[<Output file name> STRING]

Parameter definitions

Table 3-225 DECOMPLF Parameter Definitions

PARAMETER	VALUE	DEFINITION
Input file name	alphanumeric	The file name of the file to be compressed. The volume on which the input file resides must be listed before this command can be used. The input file name must end in '_Z' or the command is rejected.
Output file device	alphanumeric	The name of the volume or device on which the output file should be written. This is an optional parameter. If it is not specified, the file will be written to the volume on which the input file resides.
Output file name	alphanumeric	The filename of the compressed file. This is an optional parameter. If no output file name is specified, the output file name is the input file name with the trailing '_Z' removed.

Responses

Response 1

File not found.

Explanation:

The input file name could not be found.

System action:

None.

User action:

The input file cannot be found. Try listing the contents of the volume containing the input file before attempting the (de)compression.

Response 2

Illegal file system operation requested.

Explanation:

The wrong type of file has been specified as an input file, or the specified devices do not support all filesystem commands.

System action:

None.

User action:

Verify that the input file is actually an image file. If it is, try using SLM or IOC disk file systems.

Response 3

No space available on volume.

Explanation:

The volume to which the output file is being written to is full, so no more data can be written.

System action:

None.

User action:

Make more room on the volume, or compress the file to a device which has sufficient space.

Response 4

Invalid header record id.

Explanation:

For complf, the first word of the file is neither 'B\$' nor '\$B', indicating that the file is not a valid Series III loadfile. For decomp1f, the first word of the file is not 'BC', indicating that the file is not decompressable.

System Action:

None.

User Action:

Verify that an attempt has not been made to compress an already compressed file. Verify that an attempt has not been made to decompress an already uncompressed file. Verify that file being operated upon is a valid Series III loadfile. The file to be operated on may be corrupted. If there is a peripheral running the same load, the image should be re-dumped.

Response 5

Error occurred during compression

Error occurred during decompression

Explanation:

During the compression or decompression, an error was encountered. Another line of text follows this explaining the nature of the error. Two hex numbers are also included to further refine the cause of the error.

System Action:

None.

User Action:

Depends on the nature of the error. Attempt to resolve the reported condition, and try again to compress or decompress the image file.

Examples

>diskut

Disk utility is now active.

DISKUT:

>If s00dvol1

File information for volume S00DVOL1:

{NOTE: 1 BLOCK = 512 BYTES }

LAST FILE O R I O FILE NUM OF MAX FILE NAME
MODIFY CODE R E T P SIZE RECORDS REC
DATE G C O E IN IN LEN
C N BLOCKS FILE

940328 0 O F 5573 2797 1020 LRS02AO

>complf LRS02AO

100 records compressed...

200 records compressed...

300 records compressed...

*

*

*

2400 records compressed...

2500 records compressed...

2600 records compressed...

2700 records compressed...

Compression completed successfully.

>If s00dvol1

File information for volume S00DVOL1:

{NOTE: 1 BLOCK = 512 BYTES }

LAST FILE O R I O FILE NUM OF MAX FILE NAME
MODIFY CODE R E T P SIZE RECORDS REC
DATE G C O E IN IN LEN
C N BLOCKS FILE

```

-----
940328  0 O F      5573   2797 1020 LRS02AO
940328  0 O F      5573   1637 1020 LRS02AO_Z

```

```
>decomplf LRS02AO_Z s01dvol1 LRSBACK
```

```
100 records decompressed...
```

```
200 records decompressed...
```

```
300 records decompressed...
```

```
*
```

```
*
```

```
*
```

```
2400 records decompressed...
```

```
2500 records decompressed...
```

```
2600 records decompressed...
```

```
2700 records decompressed...
```

```
Decompression completed successfully.
```

```
>If s01dvol1
```

```
File information for volume S00DVOL1:
```

```
{NOTE: 1 BLOCK = 512 BYTES }
```

```

-----
LAST FILE O R I O   FILE   NUM OF   MAX   FILE NAME
MODIFY CODE R E T P   SIZE  RECORDS  REC
DATE   G C O E   IN   IN  LEN
      C N   BLOCKS   FILE
-----

```

```
940328  0 O F      5573   2797 1020 LRSBACK
```

Command name: DUMP

Command type

NON-MENU.

Non-Menu.

Command target

SuperNode.

Command availability

RES.

Command description

This command is used to take an image of a running node on the switch. The Dump command can be used to take an image of the CM, MS, ENET, and all Series III peripherals.

Warning

Not Applicable.

Command syntax

DUMP:

Makes a system image:

DUMP TYPE - (default: ACTIVE)

ACTIVE - dumps active processor with PROT store frozen

MATE - drops sync, freezes mate, then dumps mate's store

UNSAFE - active dump with PROT store partially frozen

DEBUG - dumps the already frozen mate for BNR debug

NOCHECK - the resulting image will not be checked

FIRSTDSPAGE - (default: first page of DS)

LASTDSPAGE - (default: last page of DS)

FIRSTPSPAGE - (default: first page of PS)

LASTPSPAGE - (default: last page of PS)

ROUTE ACTION - what to do to autoload route (default: RETAIN)

NOISE LEVEL - amount of output (default: TERSE)

SCOPE - which nodes to dump (default: TOTAL)

NODE - dumps only the specified node

TOTAL - dumps both the CM and a MS

MS - which MS to dump (default: MS0)

NOCOMPRESS OVERRIDE - override compression

NOCOMPRESS - image is dumped without compression

Parms: <FILENAME> STRING

<DEVICE> DEVICE name

[<DUMP TYPE> {ACTIVE,

MATE,

UNSAFE,

DEBUG [<OPTIONS>... {NOCHECK,

FIRSTDSPAGE <PAGE> {0 TO 32767},

LASTDSPAGE <PAGE> {0 TO 32767},

FIRSTPSPAGE <PAGE> {0 TO 32767},

LASTPSPAGE <PAGE> {0 TO 32767}}}]

[<ROUTE ACTION> {UPDATE,

RETAIN}]

[<NOISE LEVEL> {SILENT,

TERSE,

VERBOSE}]

[<SCOPE> {NODE <NODENAME> {CM,

MS <nodenumber> {0 TO 1},

LIU7 <nodenumber> {0 TO 750},

FRIU <nodenumber> {0 TO 750},

EIU <nodenumber> {0 TO 750},

.

.

.

TOTAL [<MS> {MS0,

MS1}}}]

[<NOCOMP> {NOCOMPRESS}]

New Parameter definitions

Table 3-226 DUMP Parameter Definitions

PARAMETER	VALUE	DEFINITION
NOCOMPRESS OVERRIDE	NOCOMPRESS	This optional parameter allows the craft to override automatic image compression. Some Series III nodes register with the DUMP system and request compression. This option prevents the DUMP system from compressing the image.

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AR1034mm.aa09**Directories****Table of new/modified directories****Table 3-227 New/Modified Directories**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
Footprtdir	changed		supernode	res

Accessing directory:

FOOTPRTDIR

To access

FOOTPRT

To return to CI

QUIT

Commands**Table of New/modified commands****Table 3-228 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
FPBUF	CHANGED		FOOTPRTDIR

Command name:

FPBUF

Command type

Non-menu

Command target

Supernode

Command availability

RES

Command description

This command outputs the contents of the specified footprint buffer (Active, Holding1, Holding2, Locked). The output will now also display data for the following service maintenance events.

- Service Component Reinit

This is generated prior to a reinit target being invoked on a software component by the system or manually.

Warning

None

Command syntax

No Change

Parameter Definitions

No change

Responses**Response**

```
SRC svmtc = Service Component reinit Jan-10 16:27:26.376
Service Id: < object name >
Reinit Level : < reinit level >
Reason: < reason >
```

Explanation:

The fields enclosed in brackets, <>, contain the following data:

< Object name >	Identifies the software component that is being reinitialized
< reinit level >	Severity of the reinit: 0 1 2 3 4
< reason >	Reason for invoking the reinit.

'Fault threshold exceeded'
 'Recovery progression timeout'
 'Recovery progression exhausted'
 'Application initiated'
 'Manual re-init'
 'Recovery progression on <Service_ID>'
 '<Service_id> has been initialized'
 'Previous reinit failed or trapped'

System action:

None

User action:

None

Examples

> FOOTPRT
 > FPBUF ACTIVE

... system events

```

SRC  svmtc      = Service component reinit      Jan-10 16:27:22.215
  Service Id:    TOPS
  Reinit Level:  1
  Source:        System
  Reason:        Fault threshold exceeded
  
```

```

SRC  svmtc      = Service component reinit      Jan-10 16:27:26.376
  Service Id:    Callp
  Reinit Level:  1
  Source:        System
  Reason:        Recovery progression on TOPS
  
```

```

SRC  svmtc      = Service component reinit      Jan-10 16:27:26.580
  Service Id:    E900
  Reinit Level:  1
  Source:        System
  Reason:        Callp has been initialized
  
```

Alarms

Alarm name:

Not applicable.

Conditions required to raise the alarm

Duration of the alarm

AR1035mm.aa11**Directories****Table of new/modified directories****Table 3-229 New/Modified Directories.**

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
APPL	CHANGED		SUPERNODE; BRISC	RES
SVMTC	NEW		SUPERNODE; BRISC	RES
SRCTEST	CHANGED		SUPERNODE; BRISC	RES ⁽¹⁾

(1) SRCTEST will become a resident tool in BASE04.

Accessing directory: APPL**To access:**

MAPCI;MTC;APPL

To return to CI

QUIT ALL.

Accessing directory: SVMTC**To access:**

MAPCI;MTC;APPL;SVMTC

To return to CI

QUIT ALL

Accessing directory: SVMTC**To access:**

SRCTEST

To return to CI

QUIT

Commands

Table of New/modified commands

Table 3-230 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
CHGTHRESH	NEW		SRCTEST
SVMTC	NEW		APPL
ABTK	NEW		SVMTC
BSY	NEW		SVMTC
DISP	NEW		SVMTC
NEXT	NEW		SVMTC
OFFL	NEW		SVMTC
POST	NEW		SVMTC
PREV	NEW		SVMTC
QUERY	NEW		SVMTC
REINIT	NEW		SVMTC
RTS	NEW		SVMTC
STATUS	NEW		SVMTC
TRNSL	NEW		SVMTC
TST	NEW		SVMTC

Command name: SVMTC

Command type

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command enters Service Maintenance sublevel of MAP.

Warning

None.

Command syntax

SVMTC

Parameter definitions

None.

Responses

None.

Notes

None.

Examples

svmtc

mapci;mtc;appl;svmtc

Command name: ABTK**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This is a hidden command. It aborts the maintenance action currently being performed on a service component.

Warning

None.

Command syntax

ABTK

Parameter definitions

None.

Responses**Response 1**

ABTK failed.

Explanation:

ABTK failed to abort a maintenance action.

System action:

ABTK is aborted.

User action:

None.

Response 2

ABTK passed.

OK.

Explanation:

ABTK has succeeded.

System action:

The maintenance action is aborted.

User action:

None.

Notes

None.

Examples

ABTK

Command name: STATUS

Command type

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command displays maintenance status of all services and their major depended-upon service components.

Warning

None.

Command syntax

STATUS

Parameter definitions

None.

Responses

None.

Notes

All services and their depended-upon components are defined by Service Maintenance Base.

Examples

status

Command name: POST**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command selects the service component to be subjected to service maintenance action. Service components can be specified on the basis of STATE, SERVICE, or CLASS.

Warning

None.

Command syntax

```
POST [ <Option> {STATE <state_name> | SERVICE <service_name> | CLASS  
<class_name>}]
```

Parameter definitions

Table 3-231 POST Parameter Definitions.

PARAMETER	VALUE	DEFINITION
Option	STATE	Posts the services matching the given state.
	SERVICE	Posts the services matching the given service name.
	CLASS	Posts the services matching the given class.
state_name	SysB	Posts services in SysB.
	ManB	Posts services in ManB.
	OffL	Posts services in OffL.
	ISTb	Posts services in ISTb.
	DBsy	Posts services in DBsy.
	InSv	Posts services in InSv.
service_name	alphanumeric	Posts the service matching the given service.
class_name	alphanumeric	Posts the service matching the given class.

Responses

Response

EITHER incorrect optional parameter(s) OR too many parameters.

Failed to create new Post set

Explanation:

Users entered invalid service_name.

System action:

None.

User action:

Users can re-post the service with valid service_name.

Notes

None.

Examples

post STATE sysb

post SERVICE service_name

post CLASS class_name

Command name: TRNSL**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command displays direct USES or USEDDBY components associated with the posted service, i.e. identifies depended-upon and dependent objects of the posted service.

Warning

None.

Command syntax

TRNSL [<Option> {USES [ALL] | USEDDBY [ALL]}]

Parameter definitions

Table 3-232 TRNSL Parameter Definitions.

PARAMETER	VALUE	DEFINITION
Option	USES	List direct uses (depended-upons) service components of posted service.
	USEDDBY	List all usedby (dependents) service components of posted service.
	ALL	Used with above options to list all, instead of only direct, uses (depended-upons) or usedby (dependents) service components of posted service.

Responses

None.

Examples

trnsI

trnsI USES ALL

trnsI USEDBy

trnsI USEDBy ALL

Command name: TST**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command performs a test or AUDIT on a service component which is in a ManB, InSv, or ISTb state. It corrects any inconsistencies detected.

Warning

None.

Command syntax

TST [<Option> {AUDIT}]

Parameter definitions

Table 3-233 TEST Parameter Definitions

PARAMETER	VALUE	DEFINITION
Option		Test the service.
	AUDIT	Audit the service which must be in the states InSv, IsTb or ManB.

Responses**Response 1**

TEST passed.

OK.

Explanation:

Testing the service has passed.

System action:

None. The status display value remains the same.

User action:

None.

Response 2

TEST failed.

Explanation:

Testing the service has failed.

System Action

None. The status display value remains the same.

User action:

None.

Response 3

Service_name is OffL.

No Action Taken.

Explanation:

Audit is initiated while the posted service is in a state other than InSv, ISTb or ManB. It reports the current state of the service and rejects the audit since the service has to be in either InSv, ISTb or ManB.

System action:

No action taken. The status display value remains the same.

User action:

If users want to audit the specified service, do a ManB on it before AUDIT it.

Response 4

In-Service Audits Initiated

AUDIT passed.

OK.

Explanation:

Audit is initiated while the posted service is in either InSv or ISTb. The audit is passed.

System Action

None. The status display value remains the same.

User action:

None.

Response 5

Off-Service Audits Initiated

AUDIT passed.

OK.

Explanation:

Audit is initiated while the posted service is in ManB. The audit is passed.

System action:

None. The status display value remains the same.

User action:

None.

Response 6

In-Service Audits Initiated

AUDIT failed.

Explanation:

The audit failed.

System action:

None. The status display value remains the same.

User action:

None.

Notes

The service component has be InSv/ISTb/ManB before being audited. The audit on a service component which is in a state other than InSv/ISTb/ManB will be rejected to avoid wasting time.

Examples

test

TEST passed.

OK.

test

TEST failed.

audit

Off-Service Audits Initiated

AUDIT passed.

OK.

audit

On-Service Audits Initiated

AUDIT failed.

audit

Service_name is OffL.

No Action Taken.

Command name: BSY**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command changes the state of a specified service component of the posted service to ManB. It disallows BSying any service component with InSv/ISTb dependents unless the NOCHECK option is used. The default of the BSY command is to perform a deload if applicable.

Warning

Completion of the default of this command (deload) may take an extended period of time, which will be limited by timeout.

Use of NODELOAD and NOCHECK options might affect the calls in processing.

Command syntax

BSY [<Option> {NODELOAD | NOCHECK}]

Parameter definitions

Table 3-234 BSY Parameter Definitions

PARAMETER	VALUE	DEFINITION
Option		Deload is performed by default
	NODELOAD	Not to perform the deload.
	NOCHECK	Allows BSY any service component with InSv/ISTb dependents.

Responses

The execution of BSY command with different options under different scenarios cause different system responses. These responses are summarized in the following table.

Table 3-235 BSY System Responses

	The service to be busied is InSv/ISTb			The service to be busied is NOT InSv/ ISTb
	The service has dependent(s).		The service has no dependents.	
	Dependents are InSv/ISTb	others		
BSY	list dependents ➡ reject ➡ fail cmd	deload ➡ busy	deload ➡ busy	busy
BSY NODELOAD	list dependents ➡ prompt (nodeload) ➡ reject ➡ fail cmd	busy	busy	busy
BSY NOCHECK	list dependents ➡ prompt (ncheck) ➡ deload ➡ busy	deload ➡ busy	deload ➡ busy	busy
BSY NODELOAD NOCHECK	list dependents ➡ prompt (nodeload) ➡ prompt (ncheck) ➡ busy	busy	busy	busy

Response 1

Following services may be affected:

service_name_1

service_name_2

:

Please confirm NODELOAD/NOCHECK option (Yes or No):

Explanation:

This response informs users that the service to be busied has dependents that are in InSv/ISTb, continuous execution might affect these dependents. To be safe, Yes/No prompt is provided before the BSY NODELOAD or BSY NOCHECK action.

System action:

If the dependents are in InSv/ISTb, the system will provide a list of dependents, prompt user for caution and wait for answer.

User action:

Enter either “Yes” (or “Y”) to continue the execution, or “No” (or “N”) to abort.

Response 2

Deloading timeout.

Explanation:

After the execution of BSY (deload), this response warns users that there is a delay because of call processing traffic.

System action:

System undo the deloading and abort the action.

User action:

No user action required.

Response 3

Deloading failed.

Explanation:

This response informs users that the deloading has failed.

System action:

The BSY (deload) is aborted.

User action:

Users may try to BSY NODELOAD or BSY again.

Response 4

Rejected.

Explanation:

This response informs users that the execution has been rejected.

System action:

None.

User action:

Users may try to BSY with NOCHECK option.

Response 5

BSY failed.

Explanation:

This response informs users that the BSY has failed.

System action:

The BSY is aborted.

User action:

None.

Response 6

OK.

Explanation:

This response informs users that the BSY has succeed.

System action:

None.

User action:

None.

Notes

1. The service component can be in any state.

2. Yes/No prompts for NODELOAD and NOCHECK options are provided for confirmation.
3. Not all services support deloading. System responses related to deloading are applicable only to those services that support deloading.

Examples

bsy

Deloading timeout.

BSY failed.

bsy

Deloading failed.

BSY failed.

bsy nodeload

Following services may be affected:

service_name_1

service_name_2

:

Please confirm NODELOAD option (Yes or No): Yes

OK.

bsy

Following services may be affected:

service_name_1

service_name_2

:

Rejected.

BSY failed.

bsy nocheck

Following services may be affected:

service_name_1

service_name_2

:

Please confirm NOCHECK option (Yes or No): Yes

OK.

bsy nodeload nocheck

Following services will be affected by NOCHECK:

service_name_1

service_name_2

:

Please confirm NODELOAD option (Yes or No): Yes

Please confirm NOCHECK option (Yes or No): Yes

OK.

Command name: RTS**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command attempts to return to service a specified service or service component. Audit routines are performed and RTS is executed if the audits succeed.

Warning

None.

Command syntax

RTS

Parameter definitions

None.

Responses**Response 1**

Service_name is SysB/OffL/ISTb/DBsy/InSv.

No Action Taken.

Explanation:

This response is given when users try to RTS the posted service which is in a state other than ManB. The service to be returned to service has to be ManB.

System action:

No action taken.

User action:

Users should manually busy the posted service before RTS it.

Response 2

Service_name RTS Passed

OK.

Explanation:

The specified service has been returned to service.

System action:

The status code display for the posted service changes accordingly. The status display values for ManB and InSv in the summary are updated.

User action:

None.

Response 3

Service_name RTS Failed

Explanation:

The RTS failed.

System action:

The command is aborted. The status display remains the same.

User action:

None.

Notes

The service component has to be ManB before entering RTS.

Examples

```
rts
Service_name RTS Passed
OK.
```

```
rts
Service_name is SysB/InSv/ISTb/OffL/DBsy.
No Action Taken.
```

```
rts
Service_name RTS Failed
```

Command name: REINIT**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command re-initializes the posted service component at various levels. This command disallows REINIT service components with InSv/IsTb initialization dependents (can be overridden by the NOCHECK option).

Warning

This command, depending on the reinit level, terminates the services.

Command syntax

REINIT <Option> { 1 [NOCHECK] | 2 [NOCHECK] | 3 [NOCHECK] | 4 [NOCHECK] }

Parameter definitions

Table 3-236 REINIT Parameter Definitions

PARAMETER	VALUE	DEFINITION
Option	1	Defined by application.
	2	Defined by application.
	3	Defined by application.
	4	Defined by application. It is password protected.
	NOCHECK	Used with last four parameters to allow REINIT service component with InSv/ISTb dependents.

Responses

The execution of REINIT command with different options under different scenarios cause different system responses. These responses are summarized in the following table.

Table 3-237 REINIT System responses

	The service to be busied is InSv/ISTb			The service to be busied is NOT InSv/ISTb
	The service has dependent(s).		The service has no dependents	
	Dependents are InSv/ISTb	others		
REINIT1/2/3	list dependents ➡ prompt (reinit) ➡ reject ➡ fail cmd	reinit 1/2/3	reinit 1/2/3	reinit 1/2/3

Table 3-237 REINIT System responses

REINIT 4	list dependents ➡ prompt (reinit) ➡ passwd prompt ➡ reject ➡ fail cmd	reinit 4	reinit 4	reinit 4
REINIT 1/2/3 NOCHECK	list dependents ➡ prompt (reinit) ➡ prompt (nocheck) ➡ reinit	reinit 1/2/3	reinit 1/2/3	reinit 1/2/3
REINIT 4 NOCHECK	list dependents ➡ prompt (reinit) ➡ passwd prompt ➡ prompt (nocheck) ➡ reinit	reinit 4	reinit 4	reinit 4

Response 1

Please confirm REINIT (Yes or No):

Explanation:

To be safe, Yes/No prompt is provided before the REINIT action.

System action:

Waits for users' answer (Yes or No).

User action:

Enter either "Yes" to continue the execution, or "No" to abort.

Response 2

Please enter your password:

Invalid Password.

Explanation:

Level 4 reinitialization is password protected. This response informs users that the password entered is invalid.

System action:

Abort the command. No action is taken.

User action:

None.

Response 3

Following services may be affected:

service_name_1

service_name_2

:

Please confirm NOCHECK option (Yes or No):

Explanation:

This response informs users that the service to be busied has dependents that are in InSv/ISTb, continuous execution might affect these dependents. To be safe, Yes/No prompt is provided before the REINIT 1/2/3/4 NOCHECK action.

System action:

If the dependents are in InSv/ISTb, the system will provide a list of dependents, prompt user for caution and wait for answer.

User action:

Enter either “Yes” (or “Y”) to continue the execution, or “No” (or “N”) to abort.

Response 4

Rejected.

Explanation:

This response informs users that the execution has been rejected.

System action:

None.

User action:

Users may try to REINIT with NOCHECK option.

Response 5

REINIT failed.

Explanation:

This response informs users that the REINIT has failed.

System action:

The REINIT is aborted.

User action:

None.

Response 6

OK.

Explanation:

The specified service has been re-initialized.

System action:

The status code display for the posted service changes accordingly. The status display values in the summary are updated.

User action:

None.

Notes

The service has to be InSv/ISTb/ManB.

Examples

reinit 1

Please confirm REINIT (Yes or No): Yes
OK.

reinit 2 NOCHECK

Following services will be affected:

service_name_1

service_name_2

:

Please confirm REINIT (Yes or No): Yes

Please confirm NOCHECK (Yes or No): Yes

OK.

reinit 3

Please confirm REINIT (Yes or No): Yes

REINIT failed.

reinit 4 NOCHECK

Following services will be affected:

service_name_1

service_name_2

:

Please confirm REINIT (Yes or No): Yes

Please enter your password:

Please confirm NOCHECK (Yes or No): Yes

OK.

Command name: OFFL**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command sets a posted service component (by default) or all service components of the posted set to the off-line state.

Warning

None.

Command syntax

OFFL [<Option> {ALL}]

Parameter definitions**Table 3-238 OFFL Parameter Definitions**

PARAMETER	VALUE	DEFINITION
Option		By default, it sets the posted service component to the off-line state.
	ALL	Sets all service components of the posted set to the off-line state.

Responses**Response 1**

No service posted.

Explanation:

This response is given when users try to OffL a service which has not been posted.

System action:

None.

User action:

Users should post a service before OffL it.

Response 2

Service_name is SysB/OFFL/ISTb/DBsy/InSv.

No Action Taken.

Explanation:

This response is given when users try to OffL a service which is not in ManB. The service to be off-lined has to be ManB.

System action:

No action taken.

User action:

Users should ManB the service before OffL it.

Response 3

Service_name Offl.

OK.

Explanation:

The posted service has been off-lined.

System action:

The status code display for the posted service changes to OffL. The status display values for ManB and OffL in the summary are updated.

User action:

None.

Notes

The service component has to be in ManB state before being off-lined.

Examples

offl

offl ALL

Command name: DISP**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command displays the set of services matching a specified state, service or class.

Warning

None.

Command syntax

```
DISP [<Option> {STATE <state_name> | SERVICE <service_name> | CLASS  
<class_name>}]
```

Parameter definitions

Table 3-239 DISP Parameter Definitions

PARAMETER	VALUE	DEFINITION
Option	STATE	Displays the set of services matching the given state.
	SERVICE	Displays the set of services matching the given service name.
	CLASS	Displays the set of services matching the given class.
state_name	SysB	Displays services that are SysB.
	ManB	Displays services that are ManB.
	OffL	Displays services that are OffL.
	ISTb	Displays services that are ISTb.
	DBsy	Displays services that are DBsy.
	InSv	Displays services that are InSv .
service_name	Defined by Service Maintenance Base	Displays the service matching the given service name.
class_name	Defined by Service Maintenance Base	Displays the service matching the given class.

Responses

Response

No service in the given STATE/SERVICE/CLASS.

Explanation:

There is no service components that are in the specified state, service or class.

System action:

None.

User action:

None.

Notes

None.

Examples

disp STATE sysb

disp SERVICE service_name

disp CLASS class_name

Command name: QUERY**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command displays a variety of information about the posted service. Information displayed includes maintenance attributes (by default), MODULE and FLT (fault) history.

By default, QUERY displays information related to the current maintenance status of the posted service component, such as state, maintenance attributes and error thresholds etc.

Warning

None.

Command syntax

QUERY [<Option> {MODULE | FAULT}]

Parameter definitions

Table 3-240 QUERY Parameter Definitions

PARAMETER	VALUE	DEFINITION
Option	MODULE	List all module ids involved in the posted service. This is the default option.
	FAULT	Display the history of fault.

Responses

None.

Notes

None.

Examples

query

query module

query fault

Command name: NEXT

Command type

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command selects the next service component in a posted set, or displays the next screen in a displayed status set.

Warning

None.

Command syntax

NEXT

Parameter definitions

None.

Responses**Response**

End of posted set.

Explanation:

It has reached the end of the posted set.

System action:

None.

User action:

Users can then use PREV command to go back previous item in the set or last screenful display.

Notes

None.

Examples

None.

Command name: PREV**Command type**

MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This command selects the previous service component in a posted set, or displays the previous screen in a displayed status set.

Warning

None.

Command syntax

PREV

Parameter definitions

None.

Responses

Beginning of post set.

Explanation:

It has reached the beginning of the posted set.

System action:

None.

User action:

Users can then use NEXT command to go to next item in the set or next screenful display.

Notes

None.

Examples

prev

Command name: CHGTHRESH

Command type

NON-MENU

Command target

SUPERNODE; BRISC

Command availability

RES

Command description

This is a new SRCTEST command. It allows users to change the error thresholds of a service class. The error threshold determines how many traps or service errors against a service are recorded before a re-initialization is applied.

Warning

None.

Command syntax

```
CHGTHRESH [ <class_name> <audit_level_threshold> <reinit_level_1_threshold>  
<reinit_level_2_threshold> <reinit_level_3_threshold> <reinit_level_4_threshold>]
```

Parameter definitions

Table 3-241 CHGTHRESH Parameter Definitions

PARAMETER	VALUE	DEFINITION
class_name	Defined by Service Maintenance Base	The given service class whose error threshold will be changed
audit_level_threshold	numeric	New error threshold for audit level
reinit_level_1_threshold	numeric	New error threshold for reinitialization level 1

Table 3-241 CHGTHRESH Parameter Definitions

PARAMETER	VALUE	DEFINITION
reinit_level_2_threshold	numeric	New error threshold for reinitialization level 2
reinit_level_3_threshold	numeric	New error threshold for reinitialization level 3
reinit_level_4_threshold	numeric	New error threshold for reinitialization level 4

Responses

None.

Notes

None.

Examples

```
chgthresh class_name audit_level_threshold rereinit_level_1_threshold  
reinit_level_2_threshold reinit_level_3_threshold reinit_level_4_threshold
```

Alarms**Alarm name: SvMtc****Conditions required to raise the alarm**

Applications will define the following:

1. When to request raising the alarm.
2. The severity (type) of the alarm (Service Maintenance Base enforces a minimum state-alarm-mapping, please refer to AR1035DD for detail descriptions).
3. The fault status of the alarm, which is the service class name registered at the Service Maintenance Base by the applications.

The Service Maintenance sets the alarm after comparing the requested alarm with existing alarms that are on the same MAP level.

Duration of the alarm

The alarm will be up as long as Service Maintenance has not recovered the service. But, the alarm display slot has to be shared with other alarms that are on the same MAP level, newer and in the same or higher severity.

AR1043mm.aa10

Directories

Table of new/modified directories

Table 3-242 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
DCAUTIL	NEW	N/A	BOTH	RES

Accessing directory:

To access

DCAUTIL

To return to CI

QUIT

Commands

Table of New/modified commands

Table 3-243 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
DT_START	NEW		DCAUTIL
DT_STOP	NEW		DCAUTIL
DT_LOCAL	NEW		DCAUTIL
DT_REMOTE	NEW		DCAUTIL
DT_KILL	NEW		DCAUTIL
DT_SHOW	NEW		DCAUTIL
DT_SET	NEW		DCAUTIL
DT_ALARMS	NEW		DCAUTIL
DT_REPORT	NEW		DCAUTIL

Command name: DT_START

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Starts the DCA Detection processes and changes activation state to ACTIVE.

Warning

N/A

Command syntax

DT_START

Parameter definitions

Responses

Response 1

Operation successful.

Explanation:

The command was successfully executed.

System action:

DCA Detection processes are started.
Activation state changes to ACTIVE.

User action:

N/A

Response 2

Operation ignored.

Explanation:

The command was ignored because it would have no effect. The command may have been invoked twice.

System action:

N/A

User action:

N/A

Response 3

Operation not permitted.

Explanation:

The command is not permitted in the current activation state.

System action:

N/A

User action:

Change the activation state and retry the command.

Notes

N/A

Examples

```
>DT_START  
Operation successful.
```

Command name: DT_STOP

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Stops DCA Detection processes and changes activation state to IDLE.

Warning

N/A

Command syntax

DT_STOP

Parameter definitions

N/A

Responses**Response 1**

Operation successful.

Explanation:

The command was successfully executed.

System action:

DCA Detection processes are stopped.
Activation state changes to IDLE.

User action:

N/A

Response 2

Operation ignored.

Explanation:

The command was ignored because it would have no effect. The command may have been invoked twice.

System action:

N/A

User action:

N/A

Response 3

Operation not permitted.

Explanation:

The command is not permitted in the current activation state.

System action:

N/A

User action:

Change the activation state and retry the command.

Notes

N/A

Examples

```
>DT_STOP  
Operation successful.
```

Command name: DT_REMOTE

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Changes activation state from IDLE to REMOTE_READY.

Warning

N/A

Command syntax

DT_STOP

Parameter definitions

N/A

Responses**Response 1**

Operation successful.

Explanation:

The command was successfully executed.

System action:

DCA Detection processes are stopped.
Activation state changes to REMOTE_READY.

User action:

N/A

Response 2

Operation ignored.

Explanation:

The command was ignored because it would have no effect. The command may have been invoked twice.

System action:

N/A

User action:

N/A

Response 3

Operation not permitted.

Explanation:

The command is not permitted in the current activation state.

System action:

N/A

User action:

Change the activation state to IDLE and retry the command.

Notes

N/A

Examples

```
>DT_REMOTE  
Operation successful.
```

Command name: DT_LOCAL

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Changes activation state from REMOTE_READY to IDLE.

Warning

N/A

Command syntax

DT_STOP

Parameter definitions

N/A

Responses**Response 1**

Operation successful.

Explanation:

The command was successfully executed.

System action:

Activation state changes to IDLE.

User action:

N/A

Response 2

Operation ignored.

Explanation:

The command was ignored because it would have no effect. The command may have been invoked twice.

System action:

N/A

User action:

N/A

Response 3

Operation not permitted.

Explanation:

The command is not permitted in the current activation state.

System action:

N/A

User action:

Change the activation state to REMOTE_READY and retry the command.

Notes

N/A

Examples

```
>  
>DT_LOCAL  
Operation successful.  
>
```

Command name: DT_KILL

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Stops DCA Detection processes and changes activation state to IDLE no matter what the current state is.

Warning

DCA Detection will be deactivated.
Please confirm (“YES”, “Y”, “NO”, or “N”):

Command syntax

DT_START

Parameter definitions

N/A

Responses**Response 1**

Operation successful.

Explanation:

The command was successfully executed.

System action:

DCA Detection processes are stopped.
Detection activation state changes to IDLE.

User action:

N/A

Response 2

Operation ignored.

Explanation:

The command was ignored because it would have no effect. The command may have been invoked twice.

System action:

N/A

User action:

N/A

Notes

N/A

Examples

```
>  
>DT_KILL  
DCA Detection will be deactivated.  
Please confirm ("YES", "Y", "NO", or "N"):  
>y  
Operation successful.  
>
```

Command name: DT_SHOW

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Shows the activation state, alarm setting or any of the parameter values.

Warning

N/A

Command syntax

DT_SHOW ALL | STATE | ALARMS | <parameter name>

Parameter definitions

Table 3-244 DT_SHOW Parameter Definitions

PARAMETER	VALUE	DEFINITION
ALL	N/A	All available information
STATE	N/A	Activation state
ALARMS	N/A	Alarm setting
<parameter name>	MINOR_ALERT,MINOR_CLEAR, CLEAR_CYCLES,MINOR_THRASH _ALERT,MINOR_THRASH_CLEAR, MAJOR_THRASH_ALERT, MAJOR_THRASH_CLEAR, THRASH_CYCLES,CYCLE_TIME, SAMPLE_TIME, SAMPLE_SIZE,NUM_SUSPECT, NUM_MONITOR,	The name of an operational parameter

Responses

The specified information is shown.

Notes

N/A

Examples

```
>  
>DT_SHOW ALL  
Detection activation state: IDLE  
MINOR_ALERT      30  
MINOR_CLEAR      3  
CLEAR_CYCLES     5  
MINOR_THRASH_ALERT 199  
MINOR_THRASH_CLEAR 100  
MAJOR_THRASH_ALERT 200  
MAJOR_THRASH_CLEAR 101  
THRASH_CYCLES    5  
CYCLE_TIME       10  
SAMPLE_TIME      3  
SAMPLE_SIZE      70  
NUM_SUSPECT      5  
NUM_MONITOR      10  
ALARMS           OFF  
>
```

```
>DT_SHOW STATE
Detection activation state: IDLE
>

>DT_SHOW ALARMS
ALARMS      OFF
>
```

Command name: DT_SET

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Set the value of any of the operational parameter values.

Warning

N/A

Command syntax

DT_SET <parameter_name> <value>

Parameter definitions

Table 3-245 DT_SET Parameter Definitions

PARAMETER	VALUE	DEFINITION
<parameter name>	MINOR_ALERT,MINOR_CLEAR, CLEAR_CYCLES,MINOR_ THRASH_ALERT, MINOR_THRASH_CLEAR, MAJOR_THRASH_ALERT, MAJOR_THRASH_CLEAR, THRASH_CYCLES,CYCLE_ TIME,SAMPLE_TIME, SAMPLE_SIZE,NUM_SUSPECT, NUM_MONITOR,	The name of an operational parameter
<value>	numeric	The valid range for each operational parameter is documented in the FN section.

Responses

If a value outside of the valid range for the parameter is entered, the user is prompted to reenter a valid value, or abort the command.

If the command is accepted, one of three responses can be given.
Following each response, the resulting parameter value is shown as if the DT_SHOW command had been invoked.

Response 1

Operation successful.

Explanation:

The command was successfully executed.

System action:

The parameter is set to the specified value.

User action:

N/A

Response 2

Operation invalid.

Explanation:

The specified value is invalid for this parameter because it violates an invariant as described in the FN section.

System action:

N/A

User action:

N/A

Response 3

Operation not permitted.

Explanation:

The command is not permitted in the current activation state.

System action:

N/A

User action:

Change the activation state and retry the command.

Notes

N/A

Examples

```
>
>dt_set MINOR_ALERT 20
Operation successful.
MINOR_ALERT      20
>

>dt_set MINOR_CLEAR 20
Operation invalid.
MINOR_CLEAR      3
>
```

```
>dt_set MINOR_ALERT 20
Operation not permitted.
MINOR_ALERT      20
>
```

Command name: DT_ALARMS**Command type**

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Enable or disable the alarms for DCA logs.

Warning

N/A

Command syntax

DT_ALARMS ON | OFF

Parameter definitions**Table 3-246 DT_ALARMS Parameter Definitions**

PARAMETER	VALUE	DEFINITION
ON	N/A	Enable alarms for subsequent DCA logs.
OFF	N/A	Suppress alarms for subsequent DCA logs.

Responses**Response**

```
ALARMS      ON | OFF
Operation successful.
```

Explanation:

The command was successfully executed.

System action:

The alarm setting was changed as specified.

User action:

N/A

Notes

N/A

Examples

```
>  
>dt_alarms off  
ALARMS      OFF  
Operation successful.  
>  
  
>dt_alarms on  
ALARMS      ON  
Operation successful.  
>
```

Command name: DT_REPORT

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

Display the most recent Detection report.

Warning

N/A

Command syntax

DT_REPORT

Parameter definitions

Responses

Response 1

Operation successful.

Explanation:

The command was successfully executed.

System action:

The most recent Detection report is displayed.

User action:

Examine the report.

Response 2

Operation invalid.

Explanation:

Detection is not active.

System action:

N/A

User action:

Activate detection.

Notes

N/A

Examples

```
>
>dt_report
  DCA Detection Report
  -----
  non-MCE IA total = 0
  MCE IA total    = 0
  -----
  Number      MCE State  Total  Line  Trunk
  6136211500   Monitor     30    30    0
  6138211500   Clear       31    31    0
  6138311500   Clear(overflow) 31    31    0
  -----

Operation successful.
>
```

Alarms

Alarm name:N/A

Conditions required to raise the alarm

Duration of the alarm

AR1241mm.aa10

Directories

Table of new/modified directories

Table 3-247 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
AINTRACEDIR	NEW		M68K	RES

Accessing directory: AINTRACEDIR

To access

AINTRACE

To return to CI**Commands****Table of New/modified commands****Table 3-248 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
AINTRACE	NEW		---
QUIT	NEW		AINTRACEDIR
SELECT	NEW		AINTRACEDIR
REMOVE	NEW		AINTRACEDIR
START	NEW		AINTRACEDIR
STOP	NEW		AINTRACEDIR
STATUS	NEW		AINTRACEDIR
DISPLAY	NEW		AINTRACEDIR

Command name: AINTRACE

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

Provides entry into the AINTRACE environment.

Warning

None

Command syntax

AINTRACE

Parameter definitions

No parameters

Responses

Response: AINTRACE:

Explanation:

This is the AINTRACE command prompt. AINTRACE has been entered successfully.

System action:

None

User action:

None

Response: AINTRACE already on: for HELP type Q AINTRACE

Explanation:

You are already in the AINTRACE environment.

System action:

None

User action:

None

Notes

None

Examples

To enter the AINTRACE environment:

```
CI:  
> AINTRACE  
AINTRACE:
```

Command name: QUIT**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The QUIT command leaves the AINTRACE environment.

Warning

None

Command syntax

QUIT

Parameter definitions

No parameters

Responses**Response 1**

AINTRACE ends

Explanation:

AINTRACE has been exited successfully

System action:

None

User action:

None

Response 2

Tracing is started.
Do you really want to QUIT?
Enter 'YES' or 'NO'

Explanation:

The tool is currently tracing

System action:

Waiting for permission to QUIT

User action:

Enter YES if you want to QUIT. Tracing will be stopped before quitting.
Enter NO if you wish to continue.

Notes

None

Examples

```
> QUIT
AINTRACE ends
```

Command name: SELECT**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The SELECT command provides different ways of selecting an originating terminal for tracing.

Warning

None

Command syntax

This command selects a terminal for tracing.
Parameters are:
TID - specify a terminal id for the terminal
DN - specify the directory number for the terminal
LEN - specify the line equipment number for the terminal
TRK - specify the trunk clli for the terminal
 <Options:> {TID<NODE:> {0 TO 4095}
 <TERMINAL:> {0 TO 4095},
 TRK<CLLI:>. STRING
 <MEMBER NUMBER:> {0 TO 9999},
 DN<DIRECTORY NUMBER:> STRING,
 LEN<LEN:> STRING}

Parameter definitions

Table 3-249 SELECT Parameter Definitions

PARAMETER	VALUE	DEFINITION
TID	N/A	Indicates terminal is being selected by Terminal Identifier (TID)
NODE	0 TO 4095	Node number of TID
TERMINAL	0 TO 4095	Terminal number of TID
TRK	N/A	Indicates trunk terminal is being selected
CLLI	STRING	Trunk group name
MEMBER NUMBER	0 TO 9999	Trunk member number within the trunk group
DN	N/A	Indicates line terminal is being selected by directory number
DIRECTORY NUMBER	7 DIGIT STRING	Directory number
LEN	N/A	Indicates line terminal is being selected by Line Equipment Number (LEN).
LEN:	STRING	String containing <site>, frame, bay, drawer and card parameters
site	STRING	Optional, site name. Defaults to 'HOST'
frame	0 TO 2047	Frame number
bay	0 TO 1	Bay number
drawer	0 TO 19	Drawer number
card	0 TO 31	Card number

Responses

Response 1

>

Explanation:

This is the command prompt, the terminal has been selected

System action:

None

User action:

None

Response 2

Selection list full

Explanation:

The terminal was not selected because the maximum number of terminals has already been selected.

System action:

None

User action:

None

Response 3

Terminal already selected

Explanation:

The terminal was not selected because it has already been selected

System action:

None

User action:

Select another terminal if required

Response 4

No such terminal

Explanation:

The parameter does not refer to a valid terminal

System action:

None

User action:

Check parameters and reenter command

Response 5

Tracing already started - use STOP first

Explanation:

Cannot SELECT or REMOVE terminals while tracing is on

System action:

None

User action:

Turn tracing off by typing STOP, then reenter SELECT command

Response 6

'n' terminals selected

Explanation:

The SELECT command found 'n' terminals matching the selection criteria.
They have been selected

System action:

None

User action:

None

Notes

None

Examples

To select a terminal by TID:

```
> SELECT TID 3 1024
```

```
>
```

To select a terminal by DN:

```
> SELECT DN 6211189
```

```
>
```

To select a terminal by LEN:

```
> SELECT LEN 27 0 12 16
```

```
>
```

To select a terminal by LEN, specifying a remote site:

```
> SELECT LEN REM1 1 0 15 32
```

To select all terminals on an EBS, by specifying the LEN of the EBS (it contains four assigned keys):

```
> SELECT LEN 0 0 1 16
```

4 terminals selected

```
>
```

To select a terminal by trunk:

```
> SELECT TRK IBNMFITOG 3
```

```
>
```

Command name: REMOVE

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The REMOVE command removes terminals from the terminal selection list.

Warning

None

Command syntax

This commands removes a terminal from the selection list.

Parameters are:

TID - specify a terminal id for the terminal

DN - specify the directory number for the terminal

LEN - specify the line equipment number for the terminal

TRK - specify the trunk cli for the terminal

ALL - removes all selected terminals

<Options:> {TID<NODE:> {0 TO 4095}

<TERMINAL:> {0 TO 4095},

TRK<CLLI:>. STRING

<MEMBER NUMBER:> {0 TO 9999},

DN<DIRECTORY NUMBER:> STRING,

LEN<LEN:> STRING}

ALL

Parameter definitions

Table 3-250 REMOVE Parameter Definitions

PARAMETER	VALUE	DEFINITION
TID	N/A	Indicates terminal is being selected by Terminal Identifier (TID)
NODE	0 TO 4095	Node number of TID
TERMINAL	0 TO 4095	Terminal number of TID
TRK	N/A	Indicates trunk terminal is being selected
CLLI	STRING	Trunk group name
MEMBER NUMBER	0 TO 9999	Trunk member number within the trunk group
DN	N/A	Indicates line terminal is being selected by directory number
DIRECTORY NUMBER	7 DIGIT STRING	Directory number
LEN	N/A	Indicates line terminal is being selected by Line Equipment Number (LEN).
LEN:	STRING	String containing <site>, frame, bay, drawer and card parameters

Table 3-250 REMOVE Parameter Definitions

PARAMETER	VALUE	DEFINITION
site	STRING	Optional, site name. Defaults to 'HOST'
frame	0 TO 2047	Frame number
bay	0 TO 1	Bay number
drawer	0 TO 19	Drawer number
card	0 TO 31	Card number
ALL	N/A	Removes ALL selected terminals

Responses**Response 1**

>

Explanation:

This is the command prompt. The terminal has been successfully removed

System action:

None

User action:

None

Response 2

'n' terminals removed

Explanation:

The REMOVE command found 'n' terminals matching the removal criteria. They have been removed

System action:

None

User action:

None

Response 3

Terminal not selected

Explanation:

The parameter does not refer to a selected terminal

System action:

None

User action:

Check parameters and reenter command if necessary

Response 4

Tracing already started - use STOP first

Explanation:

Cannot SELECT or REMOVE terminals while tracing is on

System action:

None

User action:

Turn tracing off by typing STOP, then reenter REMOVE command

Notes

None

Examples

To remove all selected terminals:

> REMOVE ALL

>

To remove a terminal by TID:

> REMOVE TID 23 1042

>

To remove a terminal by DN:

```
> REMOVE DN 6211189
```

```
>
```

To remove a terminal by LEN:

```
> REMOVE LEN 0 0 13 24
```

```
>
```

To remove a terminal by TRK:

```
> REMOVE TRK IBNMFITOG 9
```

```
>
```

Command name: START**Command type**

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The START command starts tracing activity originating on the selected terminals.

Warning

None

Command syntax

START

Parameter definitions

No parameters

Responses

Response 1

Started

Explanation:

Tracing is started

System action:

None

User action:

None

Response 2

Tracing already started

Explanation:

Self explanatory

System action:

None

User action:

None

Response 3

No TIDs selected

Explanation:

Self explanatory

System action:

None

User action:

Select one or more terminals, then reenter the START command

Notes

None

Examples

```
> START  
Started
```

Command name: STOP**Command type**

NON-M

Command target

SUPERNODE

Command availability

RES

Command description

The STOP command stops the tracing activity on the selected terminals.

Warning

None

Command syntax

STOP

Parameter definitions

No parameters

Responses**Response 1**

Stopped

Explanation:

Tracing is stopped

System action:

None

User action:

None

Response 2

Tracing not on

Explanation:

Self explanatory

System action:

None

User action:

None

Notes

None

Examples

> STOP
Stopped

Command name: STATUS

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The STATUS command displays the user's terminal selection list and tracing status (on/off).

Warning

None

Command syntax

STATUS

Parameter definitions

No parameters

Responses**Response**

TRACING: Disabled
Terminals Selected:
NODETERMINALAGENT
22147LEN HOST 00 1 04 18DN 7224111
12103LEN HOST 00 0 03 5DN 7224546

Explanation:

Status of the user

System action:

None

User action:

None

Notes

None

Examples

To display status of the AINTRACE session:
> STATUS

Command name: DISPLAY

Command type

NON-MENU

Command target

SUPERNODE

Command availability

RES

Command description

The DISPLAY command displays the output of the AINTRACE tool to the user's MAP terminal.

Warning

None

Command syntax

DISPLAY

Parameter definitions

No parameters

Responses

Response 1

Nothing to display

Explanation:

No data has been collected

System action:

None

User action:

Check terminal selection, then try tracing again

Response 2

```
***** WARNING *****  
AINTRACE Buffer is FULL  
Data may have been lost  
***** WARNING *****
```

Explanation:

The buffer has been completely filled, and data may have been lost

System action:

None

User action:

Check data carefully when displaying.

Response 3

See figure?

Explanation:

AINTRACE output

System action:

None

User action:

None

Notes

None

Examples

To display collected data:
> DISPLAY

Alarms

None

AR1276mm.aa06

Directories

Not applicable.

Commands

TRAVER CI command and TRNSLVF subcommand of the
MAPCI;MTC;TRKS;TTP MAP level.

Table of New/modified commands

Table 3-251 New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TRAVER	CHANGED	N/A	CI
TRNSLVF	CHANGED	N/A	MAPCI;MTC;TRKS;TTP

Command name: TRAVER

Command type

NON-MENU

Command target

BOTH

Command availability

RES

Command description

TRAVER is a tool used to verify the translation result on an input set of dialed digits from any of the supported agent types (e.g. trunk or line) and display this result. If the T (Trace) or B (Both) option is specified on the command line, a display of the tables encountered during translation is given as well.

The trace output of TRAVER, if requested with either the T (Trace) or B (Both) option and verification is done on a trunk group which subscribes to AIN, is changed by this activity to show the applicable entry containing the subscription data in the new table TRKAIN. Under these conditions, the corresponding TRKGRP entry is also displayed but without the AIN option.

Warning

Not applicable.

Command syntax

UNCHANGED. Only command output is affected.

Parameter definitions

Not applicable.

Responses

Response

```
>traver tr inmf 92510001 b
(OLD) TABLE TRKGRP
(OLD) INMF IBNTI 0 ELO NCRT COMKODAK 0 0 7224111
ANSDISC 0 (OLD) N N N N N Y N 0 0 N N N N N
(OLD) $ NATL (AIN TRIGGRP_OFFHKDEL) $
(NEW) TABLE TRKGRP
(NEW) INMF IBNTI 0 ELO NCRT COMKODAK 0 0 7224111
ANSDISC 0 (NEW) N N N N N Y N 0 0 N N N N N
(NEW) $ NATL $
(NEW) ..TABLE TRKAIN
(NEW) ..INMF TRIGGRP_OFFHKDEL
TABLE CUSTSTN
COMKODAK AIN AIN CUSTTRIGGRP_CDP
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFCTRIGGRP_ALL
```

TABLE NCOS
 COMKODAK 0 0 0 KDK0 (OHQ 0 TONE_OHQ) (CBQ 0 3 N 2) (ACR
 N)\$
 TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA,
 FEATXLA, VACTRMT, AND DIGCOL
 COMKODAK PXDK CXDK FTCOMM 0 KDK
 TABLE DIGCOL
 KDK 9 RPT
 NCOS PRELIM XLA name is NIL. Go to next XLA name.
 TABLE IBNXLA: XLANAME PXDK
 TUPLE NOT FOUND
 Default is to go to next XLA name.
 TABLE IBNXLA: XLANAME CXDK
 CXDK 9 NET N Y N 1 Y POTS Y N DOD N 80 NONE \$
 TABLE DIGCOL
 POTS specified: POTS digit collection
 TABLE LINEATTR
 80 IBN NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC
 NILLATA 0 NIL NIL 00 N \$
 LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
 TABLE STDPRTCT
 P621 (1) (65021) 0
 . SUBTABLE STDPRT
 WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
 BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
 DOCUMENTATION.
 . 251 251 T NP 0 OFR2 1 3 10 NONE
 TABLE TRIGGRP
 TRIGGRP_OFFHKDEL INFOCOL
 Trigger R01 OFFHKDEL is applicable to individual IBN trunk.
 TABLE TRIGGRP
 TRIGGRP_OFFHKDEL INFOCOL
 . OFFHKDEL (ESC)\$ JAZZINFO
 .. TABLE TRIGESC
 .. TUPLE NOT FOUND
 .. TABLE TRIGINFO
 ... JAZZINFO EVENT TCAP R01 SS7 AINJAZZ DFLT \$
 ... TABLE C7GTTYPE
 ... AINJAZZ ANSI7 3 \$
 WARNING: AINCHG option is not specified for trunk on command line
 and
 GTV could not be determined and defaults to 0.
 ... TABLE C7GTT
 ... AINJAZZ 0000000000 0000000000 SSNONLY (AINTTEST) \$
 AIN Info Collected TDP: trigger criteria met, querying the database.
 Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

AIN Info Collected TDP: trigger criteria met, querying the database.

Use the AINRES option for further information

+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++

Explanation:

The above example shows a sample TRAVER done on a trunk group which subscribes to the AIN offhook delay trigger. Deltas in the command output are marked. The AIN option is shown as removed from table TRKGRP and the corresponding entry in TRKAIN with the subscribed to trigger group name displayed instead.

In some cases, table TRKAIN tuple will NOT be shown directly after table TRKGRP.

System action:

Not applicable.

User action:

Not applicable.

Notes

Not applicable.

Examples

Consult the MM section of AR0449, AINSSP Base: AIN TRAVER and AR0893, DMSTL Layer Changes for AIN 0.1 for related AIN TRAVER examples.

Command name: TRNSLVF**Command type**

MENU

Command target

BOTH

Command availability

RES

Command description

TRNSLVF is a TTP MAP level subcommand used to verify the translation result on an input set of dialed digits from the posted trunk group and display this result. This command only works on a trunk group which is of an incoming or two way direction. If the T (Trace) option is specified on the command line, a display of the tables encountered during translation is given as well.

The trace output of TRNSLVF, if requested with the T (Trace) option and verification is done on a trunk group which subscribes to AIN, is changed by this activity to show the applicable entry containing the subscription data in the new table TRKAIN. Under these conditions, the corresponding TRKGRP entry is also displayed but without the AIN option. Prior to this activity, the AIN subscription data was displayed in the corresponding TRKGRP entry.

Warning

Not applicable.

Command syntax

UNCHANGED. Only command output is affected.

Parameter definitions

Not applicable.

Responses**Response**

```
>mapci;mtc;trks;ttp
>post g inmf
>trnslvf 92510001 t
(OLD) TABLE TRKGRP
(OLD) INMF IBNTI 0 ELO NCRT COMKODAK 0 0 7224111
ANSDISC 0 (OLD) N N N N N Y N 0 0 N N N N N
(OLD) $ NATL (AIN TRIGGRP_OFFHKDEL) $
(NEW) TABLE TRKGRP
(NEW) INMF IBNTI 0 ELO NCRT COMKODAK 0 0 7224111
ANSDISC 0 (NEW) N N N N N Y N 0 0 N N N N N
(NEW) $ NATL $
(NEW) ..TABLE TRKAIN
(NEW) ..INMF TRIGGRP_OFFHKDEL
TABLE CUSTSTN
COMKODAK AIN AIN CUSTTRIGGRP_CDP
TABLE OFCVAR
AIN_OFFICE_TRIGGRP OFCTRIGGRP_ALL
TABLE NCOS
COMKODAK 0 0 0 KDK0 ( OHQ 0 TONE_OHQ) ( CBQ 0 3 N 2) ( ACR
N)$
TABLE CUSTHEAD: CUSTGRP, PRELIMXLA, CUSTXLA,
FEATXLA, VACTRMT, AND DIGCOL
COMKODAK PXDK CXDK FTCOMM 0 KDK
TABLE DIGCOL
KDK 9 RPT
NCOS PRELIM XLA name is NIL. Go to next XLA name.
TABLE IBNXLA: XLANAME PXDK
TUPLE NOT FOUND
Default is to go to next XLA name.
TABLE IBNXLA: XLANAME CXDK
CXDK 9 NET N Y N 1 Y POTS Y N DOD N 80 NONE $
```

```

TABLE DIGCOL
POTS specified: POTS digit collection
TABLE LINEATTR
80 IBN NONE NT FR01 0 613 P621 L613 TSPS 10 NIL NILSFC
NILLATA 0 NIL NIL 00 N $
LCABILL OFF - BILLING DONE ON BASIS OF CALLTYPE
TABLE STDPRTCT
P621 ( 1) (65021) 0
. SUBTABLE STDPRT
WARNING: CHANGES IN TABLE STDPRT MAY ALTER OFFICE
BILLING. CALL TYPE DEFAULT IS NP. PLEASE REFER TO
DOCUMENTATION.
. 251 251 T NP 0 OFR2 1 3 10 NONE
TABLE TRIGGRP
TRIGGRP_OFFHKDEL INFOCOL
Trigger R01 OFFHKDEL is applicable to individual IBN trunk.
TABLE TRIGGRP
TRIGGRP_OFFHKDEL INFOCOL
. OFFHKDEL (ESC )$ JAZZINFO
.. TABLE TRIGESC
.. TUPLE NOT FOUND
.. TABLE TRIGINFO
.. JAZZINFO EVENT TCAP R01 SS7 AINJAZZ DFLT $
... TABLE C7GTTYPE
... AINJAZZ ANSI7 3 $
WARNING: AINCHG option is not specified for trunk on command line
and
GTV could not be determined and defaults to 0.
... TABLE C7GTT
... AINJAZZ 0000000000 0000000000 SSNONLY (AINTTEST) $
AIN Info Collected TDP: trigger criteria met, querying the database.
Use the AINRES option for further information

```

```
+++ AIN TRAVER: SUCCESSFUL CALL TRACE +++
```

```
AIN Info Collected TDP: trigger criteria met, querying the database.
```

Explanation:

The above example shows a sample TRNSLVF done on a trunk group which subscribes to the AIN offhook delay trigger. Deltas in the command output are marked. The AIN option is shown as removed from table TRKGRP and the corresponding entry in TRKAIN with the subscribed to trigger group name displayed instead.

System action:

Not applicable.

User action:

Not applicable.

Notes

Not applicable.

Examples

Consult the MM section of AR0449, AINSSP Base: AIN TRAVER and AR0893, DMSTL Layer Changes for AIN 0.1 for related AIN TRNSLVF examples.

Alarms

Not Applicable.

AR1278mm.aa11

Directories

MTCSWACTCI

Table of new/modified directories

Table 3-252 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
MTCSWACTCI	CHANGED		SuperNode and BRISC	RES

Accessing directory: MTCSWACTCI

To access

CI> MTCSWACTCI

To return to CI

> QUIT

Commands

MTCSWACT, MTCPOSTSWACT,QUIT

Table of New/modified commands

Table 3-253 MTCSWACTCI New Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
MTCSWACT	CHANGED		MTCSWACTCI

Command name: MTCSWACT

Command type

NON-MENU

Command target

SUPERNODE and BRISC

Command availability

RES

Command description

This command drops sync, performs specified restarts on the inactive CPU, switches activity of CPUs and optionally synchronizes the CPUs. The whole command takes approximately 20-25 minutes.

This feature adds an additional error message, generated by the new MTCSWACT applications in CCM product, to the set of all possible messages that can be generated by the MTCSWACT command. There is no change in command syntax or parameter definition created by this feature.

Warning

None.

Command syntax

MTCSWACT <restart type> [PAUSE]

Parameter definitions

Table 3-254 MTCSWACT Parameter Definitions

PARAMETER	VALUE	DEFINITION
restart type	RELOAD	The switch drops sync and performs a reload restart on the inactive side.
	COLD	The switch drops sync and performs a cold restart on the inactive side.
	WARM	The switch drops sync and performs a warm restart on the inactive side.
pause option	No value	Default. MTCSWACT does not provide a pause before the switch of activity.
	PAUSE	Optional. MTCSWACT provides an out of sync time period before the switch of activity. This option should be used under supervision only.

There is no change in MTCSWACT parameter definition by this feature.

Responses

The following section describes the additional response created by this feature. The response is generated in case there is an error condition found by the MTCSWACT applications in CCM product.

Response

This feature provides new MTCSWACT-CCM applications, therefore, the responses generated are classified under each application.

HALT_ACTIVE_ALT

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

Note: Automatic Line Testing (ALT) could not be halted.

Explanation:

The system cannot halt the Automatic Line Testing (ALT). The MTCSWACT will continue since it is not a critical step.

System action:

The system displays the informational message and then continues on to the next step.

User action:

No user action.

Examples:

- The system cannot halt the Automatic Line Testing.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Note: Automatic Line Testing (ALT) could not be halted.

DISABLE_DCT

There is no error message displayed by this step.

REMOVE_DTA

There is no error message displayed by this step.

SET_SWCT_AMA

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: System image dump in progress.

Solution: Stop current image dump.

Sync the switch and re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

System image dump in progress. Could not set the office parameter SWCT_AMA_PREBILLING to TRUE.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must stop current image dump. Re-enter the MTCSWACT command to continue.

Examples:

- The system is dumping image.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: System image dump in progress.

Solution: Stop current image dump.

Sync the switch and re-enter MTCSWACT command.

MTCSWACT command is aborted.

DCT_RESUME

There is no error message displayed by this step.

MSWACT_SAVE_MB_LINES Step

Two possible failure cases are output in this step.

1. Fail to allocate MTCSWACT resource.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

Failed to allocate MTCSWACT resource.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must check the SWER(s) generated. Re-enter the MTCSWACT command to continue.

Examples:

- Failed to allocate critical MTCSWACT resources.

```
MTCSWACTCI> MTCSWACT WARM
```

...

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

2. A system image dump is in progress.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

Problem: System image dump in progress.

Solution: Stop current image dump and re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

A system image dump is in progress.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must stop current image dump. Re-enter the MTCSWACT command to continue.

Examples:

- The system is dumping image.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: System image dump in progress.

Solution: Stop current image dump and re-enter MTCSWACT command.

MTCSWACT command is aborted.

MSWACT_SET_MB_TO_INB Step

There is no error message displayed by this step.

MSWACT_RESTORE_MB_LINES Step

There is no error message displayed by this step.

MSWACT_FR_RELAY_BILLING step

Several failure responses are possible with this step.

1. Failed to create MTCSWACT process.

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

Failed to create MTCSWACT process.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must re-enter the MTCSWACT command to continue.

Examples:

- The system has failed to create Frame Relay Billing MTCSWACT process.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

```
Problem: Critical MTCSWACT failure. Check SWERs.
```

```
Solution: Re-enter MTCSWACT command.
```

```
MTCSWACT command is aborted.
```

1. Failed to unprotected store**Format:**

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

```
Problem: System image dump in progress.
```

```
Solution: Stop current image dump.
```

```
Sync the switch and re-enter MTCSWACT command.
```

```
MTCSWACT command is aborted.
```

Explanation:

System image dump in progress.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must stop current image dump. Re-enter the MTCSWACT command to continue.

Examples:

- The system is dumping image.

```
MTCSWACTCI> MTCSWACT WARM
```

```
...
```

Problem: System image dump in progress.

Solution: Stop current image dump.

Sync the switch and re-enter MTCSWACT command.

MTCSWACT command is aborted.

MSWACT_FR_RELAY_BILLING_VERIFY step

Several failure responses are possible with this step.

1. Resource error on active side

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

```
...
```

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

Failed to allocate MTCSWACT resource.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must re-enter the MTCSWACT command to continue.

Examples:

- The system has failed to allocate Frame Relay Billing Mailbox.

```
MTCSWACTCI> MTCSWACT WARM
```

...

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

1. Invalid message was received from MTCSWACT process

Format:

```
MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]
```

...

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

Invalid message received from MTCSWACT process.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must re-enter the MTCSWACT command to continue.

Examples:

- An invalid message was received from Frame Relay Billing MTCSWACT process.

```
MTCSWACTCI> MTCSWACT WARM
```

...

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

1. Invalid message was sent out from MTCSWACT process

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: Critical MTCSWACT failure. Check SWERs.

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

An invalid message was sent out from MTCSWACT process.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must re-enter the MTCSWACT command to continue.

Examples:

- An invalid message was sent out from Frame Relay Billing MTCSWACT process.

MTCSWACTCI> MTCSWACT WARM

...

Problem: Critical MTCSWACT failure. Check SWERs..

Solution: Re-enter MTCSWACT command.

MTCSWACT command is aborted.

1. Frame Relay Billing aggregation timeout

Format:

MTCSWACTCI> MTCSWACT <Restart type> [PAUSE]

...

Problem: MTCSWACT process timed out.

Solution: Sync the switch and re-enter MTCSWACT command.

MTCSWACT command is aborted.

Explanation:

The Frame Relay Billing Aggregation has been in progress for 10 minutes. It has timed out.

System action:

The system displays the failure message and then stops the MTCSWACT processing.

User action:

To continue with the MTCSWACT command, the user must sync the switch and re-enter the MTCSWACT command to continue.

Examples:

- The Frame Relay Billing Aggregation timed out.

MTCSWACTCI> MTCSWACT WARM

...

Problem: MTCSWACT process timed out.

Solution: Sync the switch and re-enter MTCSWACT command.

MTCSWACT command is aborted.

Notes

Not applicable.

Alarms**Alarm name:**

Not applicable.

Conditions required to raise the alarm

Not applicable.

Duration of the alarm

Not applicable.

AR1298mm.aa08

Directories

No directories are affected.

Table 3-255 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES

Table of new/modified directories**Accessing directory:****To access****To return to CI****Commands****Table of New/modified commands****Table 3-256 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME

Command name:**Command type****Command target****Command availability****Command description****Warning****Command syntax****Parameter definitions****Table 3-257 Parameter Definitions**

PARAMETER	VALUE	DEFINITION

Responses**Explanation****System action**

User action

Notes

Examples

Alarms

Alarm name:

Conditions required to raise the alarm

Duration of the alarm

AR1304mm.aa06

Directories

Table of new/modified directories

Table 3-258 New/Modified Directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/ NONRES
Svmtcdir	changed		supernode	res
Footprtdir	changed		supernode	res

Accessing directory:

SVMTCDIR

To access

MAPCI ; MTC ; APPL ; SVMTC

To return to CI

Accessing directory:

FOOTPRTDIR

To access

FOOTPRT

To return to CI

QUIT

Commands**Table of New/modified commands****Table 3-259 New/Modified Commands**

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
REINIT	CHANGED		SVMTCDIR

Command name:

REINIT

Command type

Menu

Command target

Supernode

Command availability

RES

Command description

This command performs a Level 1 re-initialization of Call Processing Base (CallP Base) software.

Warning

This command can cause a loss of service of up to 3 seconds.

Command syntax

No change.

Parameter definitions

No change.

Responses**Response**

No call origination for the duration of the Reinit
Request to Reinit CallP Base has been submitted

Explanation:

This feature registers the service name, 'CallP Base', and the level 1 impact statement, 'No call origination for the duration of the Reinit' into service maintenance.

A Level 1 re-initialization has the potential of causing a service disruption of up to 3 seconds.

System action:

This action re-initializes CallP Base data structures. There can be no call originations until the data structures have been rebuilt.

User action:

None

Notes

None

Examples

```
> Svmtc  
> Post service callp base  
> Reinit 1
```

No call origination for the duration of the Reinit
Request to Reinit CallP Base has been submitted
Reinit CallP Base Passed

Commands

Table of New/modified commands

Table 3-260 REINIT New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
TST	CHANGED		SVMTCDIR

Command name:

TST

Command type

Menu

Command target

SuperNode

Command availability

RES

Command description

This command performs a Level 0 re-initialization of Callp Base software.

Warning

This command may cause a loss of service of up to 2seconds if any data corruptions is detected.

Command syntax

No change

Parameter definitions

No change

Responses

Response

Request to Audit CallP Base has been submitted

Explanation:

This feature registers the service name, 'CallP Base', into service maintenance.

System action:

This action performs an audit of call processing base data structures. Call originations may be denied if any corruption is detected.

User action:

None

Notes

None

Examples

```
> Svmtc
> Post service callp base
> Tst audit
```

Request to Audit CallP Base has been submitted
Audit CallP Base Passed

Commands

Table of New/modified commands

Table 3-261 TST New/Modified Commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
FPBUF	CHANGED		FOOTPRTDIR

Command name:

FPBUF

Command type

Non-menu

Command target

SuperNode

Command availability

RES

Command description

This command outputs the contents of the specified footprint buffer (Active, Holding1, Holding2, Locked). The output will now also display data for the following Service Maintenance events.

- Service Component Reinit

This is generated prior to a reinit target being invoked on a software component by the system or manually.

Warning

None

Command syntax

No change

Parameter definitions

No change

Responses**Response**

```
SRC  svmtc      = Service Component reinit      Jan-10 16:27:26.376
  Service Id:    CallP Base
  Reinit Level : < reinit level >
  Reason:       < reason >
```

Explanation:

This feature registers the service name 'CallP Base' into service maintenance. No other fields have changed.

System action:

None

User action:

None

Notes

None

Examples

```
> FOOTPRT
> FPBUF ACTIVE
```

... system events

```
SRC  svmtc      = Service component reinit      Jan-10 16:27:22.215
  Service Id:    CallP Base
  Reinit Level:  0
  Source:        System
  Reason:        Fault threshold exceeded
```

```
SRC  svmtc      = Service component reinit      Jan-10 16:27:26.376
  Service Id:    CallP Base
  Reinit Level:  1
  Source:        System
  Reason:        Previous reinit failed or trapped
```

Alarms**Alarm name:**

Major alarm, 'CallP' is raised under the 'APPL' level of the MAP.

Conditions required to raise the alarm

Persistent traps in Call Processing Base software.

Duration of the alarm

Less than 5 minutes.

AR1368mm.aa03

This user manual illustrates how to use the added functionality introduced by this feature at the CI level of a MAP terminal, for both DMS-PH debugging/query commands and provisioning of DMS-PH tables. Note that some of the XLIU resident debugging tools that have been changed are in-house tools even though they may be present in customer software loads.

Commands

Directories

Commands have been changed in three directories, two of the directories are resident in the XLIU.

Table 3-262 New/Modified directories

DIRECTORY NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	TARGET	RES/NONRES
PROGDIR	(command changed)		SuperNode,BRISC	RES,(CM)
OBJMGRCIDIR	(command changed)		SuperNode, BRISC	RES,(XLIU)
XPSDIR	(command changed)		SuperNode,BRISC	RES,(XLIU)

Accessing directory: PROGDIR

To access

This directory is accessible from any CI MAP level.

To return to CI

Not applicable

Accessing directory: OBJMGRCIDIR

To access

Enter OBJMGRCI at any CI MAP level within the XLIU.

To return to CI

Enter QUIT.

Accessing directory: XPSDIR

To access

Enter XPSCI at any CI MAP level within the XLIU.

To return to CI

Enter QUIT.

Commands

Table 3-263 New/Modified commands

COMMAND NAME	NEW, CHANGED OR DELETED	NEW NAME (if renamed)	DIRECTORY NAME
QPHF	Changed		PROGDIR
DISPLAY	Changed		OBJMGRCIDIR
CREATE	Changed		OBJMGRCIDIR
SWPARM	Changed		XPSDIR

Note that some of the above commands have only been changed for specific command options

Command Name: QPHF

Command type

NON-MENU

Command target

SuperNode, BRISC

Command availability

RES

Command description

This command allows the craftperson to query and view various packet handler provisioning and services. The output of the display for querying X.75' trunks has been enhanced by this feature. Provisioning of the TSC and CSI options have been included for these trunks.

Warning

Not applicable

Command syntax

QPHF <object type> {XSG <xsg num> {0 TO 749}
 [<all option> {ALL}],
 CHNL <xsg num> {0 TO 749}
 <local chnl num> {1 TO 31},
 LTID <ltgrp> STRING
 <ltnum> {1 TO 1022},
 CLLI <cli> STRING
 <member> {0 TO 9999},
 DN <dn num> STRING,
 X75 <cli> STRING
 <member> {0 TO 9999},
 PH}

Enhanced option:

QPHF X75 <cli> <member>

Parameter definitions**Table 3-264 QPHF X75 Parameter Definitions**

PARAMETER	VALUE	DEFINITION
cli	string	This parameter is the cli of the trunk group for the trunk being queried
member	0 to 9999	This parameter is the member in the trunk group that identifies the trunk being queried

Responses

>qphf x75 tac68dtdc1x75p 1

X75 INFORMATION

```

-----
LLFSQ:    MOD8  LLWS:      2  T1:      30  T2:      2  T3:      5
N2:       3    PLSQ:    MOD8  IMWS:      7  OMWS:      7  IMPS:   128
OMPS:     128  IDTC:    9600  ODTG:    9600  MNLC:      1  LCS:
ASC
1  ADDRfmt:  E164  ESCDIG:      0  BLCN:      1  NPVC:      0  NNR:
   TDVAL:      0  T30:      180  T31:      200  T32:   180  T33:   180

```

X75ID: 01234506801

UTILITY PARAMETERS

TDI: NO RCI: YES CNIC: YES TDS: NO
NUI: YES TRFOUT: YES TRFINC: YES ACCHAR: YES
X75IDS: YES PCP: NO CSI: YES TSC: NO

MAPPING

Link CLLI, member: TAC68DTC1X75P 1

CHANNEL: 5 X.75 B

XSG: 314

Explanation

The UTILITY PARAMETERS section shows the values of the X.75' CSI and TSC options as provisioned in table TRKSGRP. Note that the X.75' utility parameters are only displayed for X.75' trunks. They consist of the ACCHAR, X75IDS, PCP, CSI and TSC.

System action

None

User action

None

Command Name: DISPLAY

Command type

NON-MENU

Command target

SuperNode, BRISC

Command availability

RES

Command access

Enter OBJMGRCI at any XLIU CI level.

Command description

This command is both a CM and XLIU resident command within the OBJMGRCIDIR directory. However, only the XLIU object manager has been enhanced by the CSI/TSC feature. From within the XLIU, OBJMGRCI allows the craftperson to display XLIU provisioning data stored in the MIT (Management Information Tree).

Warning

Not applicable

Command syntax

```
DISPLAY <object type> {xsg <> {0 TO 750},  
    l3 <xliu lid> {0 TO 511}  
    <ext byte> {0 TO 255},  
    link <xliu lid> {0 TO 511},  
    chnl <chnl id> {1 TO 60000},  
    pvc <xliu_lid> {0 TO 511}  
    <index> {0 TO 4095}}  
[<display mode> {self,  
    parent,  
    children <level> {1 TO 5},  
    relation,  
    data,  
    soc}]
```

Enhanced options:

DISPLAY XSG <xsg no.> DATA

DISPLAY L3 <xliu lid> <ext. byte> DATA

Parameter definitions

Table 3-265 DISPLAY Parameter Definitions)

PARAMETER	VALUE	DEFINITION
object type	xsg, l3, link, chnl, pvc	This parameter is used to select the type of MIT object to display. Only the xsg and l3 options are affected by the CSI/TSC feature.
xsg number	0 to 750	This parameter is the XSG number of the XSG object displayed.
display mode	data	This display mode also displays the data attributes of the displayed object.

PARAMETER	VALUE	DEFINITION
xliu lid	0 to 511	This parameter is the XLIU link id. Since a L3 object is a child of a link object, this parameter is needed in order to lookup the L3 object.
ext. byte	0 to 255	This parameter is the extension byte which uniquely identifies a L3 child object for a particular link object. In the case of an X.75/X.75' L3 object, this value is always 0.

Responses

```

>remlogin xliu 314
Remote Login complete
XLIU #314      LOAD: XRX04AL
XLIU314>objmgrci
objmgrci:
XLIU314>display xsg 314 data
*****
Object Type : xsg
Operation : format data, Scan State : first time
Operation : audit check, Scan State : first time
Operation : display      , Scan State : first time
XSG 314
xsg_ext_no 314
mode is 4
children field is ADDR=0042ED88 SIZE=0001*04 WORDS
switch wide parameters are
    trdelay is 0
    inic is 9001
    seconsub is 0
    senid is 0
    segthres is 4999999
    segsize is 64
    pvcintv is 600
    csi is 9999
    tsc is 14
Service rates are
    hour 0  rate is 0
    hour 1  rate is 0
    hour 2  rate is 0
    hour 3  rate is 0
    hour 4  rate is 0
    hour 5  rate is 0
    hour 6  rate is 0
    hour 7  rate is 0
    hour 8  rate is 0
    hour 9  rate is 0

```

```
hour 10 rate is 0
hour 11 rate is 0
hour 12 rate is 0
hour 13 rate is 0
hour 14 rate is 0
hour 15 rate is 0
hour 16 rate is 0
hour 17 rate is 0
hour 18 rate is 0
hour 19 rate is 0
hour 20 rate is 0
hour 21 rate is 0
hour 22 rate is 0
hour 23 rate is 0
```

Explanation

The switch-wide CSI and TSC values provisioned in table SVCDATA are displayed in response to the DISPLAY XSG command. They are dynamically updated in the XSG object in the XLIU whenever the craftperson changes them in the SVCDATA table.

System action

None

User action

None

```
>remlogin xliu 314
Remote Login complete
XLIU #314      LOAD: XRX04AL
XLIU314>objmgrci
objmgrci:
XLIU314>display l3 4 0
*****
Object Type : l3
Operation : format data, Scan State : first time
Operation : audit check, Scan State : first time
Operation : display      , Scan State : first time
  protocol type = X75P
interface id = 01234506801
extracted object index = 0
XLIU lid = 4,  ext byte = 0
XPS provisioning is TRUE
```

```

XLIU314>display l3 4 0 data
*****
Object Type : l3
Operation : format data, Scan State : first time
Operation : audit check, Scan State : first time
Operation : display , Scan State : first time
  protocol type = X75P
interface id = 01234506801
extracted object index = 0
XLIU lid = 4,  ext byte = 0
XPS provisioning is TRUE
Virtual Call Paramters are
  iplws = 7
  oplws = 7
  imps = 7
  omps = 7
  idtc = 10
  odtc = 10
x75p protocol parameters are
  nui = YES
  tdi = NO
  rci = YES
  cnic = YES
  tds = NO
  trfont = YES
  trfinc = YES
  acchar = YES
  pcp = NO
  x75ids = YES
  csi = YES
  tsc = NO

```

Explanation

The x75p protocol parameters values provisioned in table TRKSGRP are displayed in response to the DISPLAY L3 command. The CSI and TSC parameters are only displayed for an X.75' L3 object.

System action

None

User action

None

Command Name: SWPARM**Command type**

NON-MENU

Command target

SuperNode, BRISC

Command availability

RES

Command access

Enter XPSCI at any XLIU CI level.

Command description

This command is an XLIU resident command within the XPSEDIR directory. It is primarily a designer tool that allows the designer to view and alter XLIU switch-wide data. The display, add and change options have been enhanced to include the CSI/TSC switch-wide parameters.

Warning

Not applicable

Command syntax

```
SWPARM [<command option> {ADD,
                                DELETE,
                                CHANGE <which parm> {SEGSIZE <size> {T64,
                                                                    T128,
                                                                    T256},
                                THRES <threshold value> {0 TO 4294967295},
                                CSI <csi value> {1 TO 9999},
                                TSC <tsc value> {0 TO 14},
                                RATEP <hour> {0 TO 23}
                                <rate period> {R1,
                                                                    R2,
                                                                    R3,
                                                                    R4}}}]
```


Enhanced options:

SWPARM

SWPARM ADD

SWPARM CHANGE {CSI <csi value>, TSC <tsc value>}

Parameter definitions**Table 3-266 SWPARM CHANGE Parameter Definitions**

PARAMETER	VALUE	DEFINITION
command option	ADD, DELETE, CHANGE	This parameter selects the operation of the SWPARM command. For the ADD option, the XSG switch-wide values are initialized with their default values. The CSI and TSC values may be changed using the CHANGE option.
csi value	0000 to 9999	This parameter is the CSI switch-wide value which corresponds to the CSI field in table SVCDATA
tsc value	0 to 14	This parameter is the TSC switch-wide value which corresponds to the TSC field in table SVCDATA

Responses

XPS:

XLIU314>swparm

The Switchwide Parameters

=====

SWPARM PTR : 00463E9E

Segment Size : 64

Threshold : 4999999

CSI : 9999

TSC : 14

Rate Period Table :

0	R1	1	R1	2	R1	3	R1	4	R1	5	R1
6	R1	7	R1	8	R1	9	R1	10	R1	11	R1
12	R1	13	R1	14	R1	15	R1	16	R1	17	R1
18	R1	19	R1	20	R1	21	R1	22	R1	23	R1

Explanation

The switch-wide CSI and TSC values provisioned in table SVCDATA are displayed by the SWPARM command. They are dynamically updated in the XSG object in the XLIU whenever the craftperson changes them in the SVCDATA table.

System action

None

User action

None

Out of range: <csi value> {1 TO 9999}

Enter: <csi value>

Explanation

An invalid CSI value was entered when using the SWPARM CHANGE CSI command.

System action

None

User action

The user must enter a valid CSI value or enter 'abort'.

Out of range: <tsc value> {0 TO 14}

Enter: <tsc value>

Explanation

An invalid TSC value was entered when using the SWPARM CHANGE TSC command.

System action

None

User action

The user must enter a valid TSC value or enter 'abort'.

Table datafill changes

Tuples in tables SVCDATA and TRKSGRP have been modified to support the CSI/TSC. Refer to the Data Schema section for instructions on provisioning these tables.

Responses

WARNING: CSI value of 0000 is reserved

Explanation

This warning is issued when provisioning the CSI value in table SVCDATA with a value of 0000. A value of 0000 has been reserved for future use and should not be used.

System action

None

User action

None

DMS-100 Family
Commands Release
Reference Guide

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